

THE RIVERSIDE LIBRARY
FOR YOUNG PEOPLE

JAVA THE PEARL
OF THE EAST

BY
G. J. HIGGINSON

Sent to R. R. L. 9/25/30

REFERENCE LIBRARY OF
HOUGHTON MIFFLIN COMPANY

2 PARK STREET, BOSTON



NOT TO BE TAKEN FROM THE SHELVES
EXCEPT BY PERMISSION OF
THE LIBRARIAN

REFERENCE LIBRARY * HOUGHTON MIFFLIN CO. * BOSTON, MASS.

*Archive
Collection*



*
This book may not leave the Offices
and if borrowed must be returned within 7 days

The Riverside Library for Young People

NUMBER 7

JAVA: THE PEARL OF THE EAST

By S. J. HIGGINSON



JAVA

THE PEARL OF THE EAST

BY

S. J. HIGGINSON

WITH A MAP OF THE ISLAND



BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
The Riverside Press Cambridge

Copyright, 1890,
By S. J. HIGGINSON.

All rights reserved.

Dedicated to
MY LITTLE SON,
S. H.

PREFACE

THE object of this little volume, written by request, is to give to the young people of this country, in as concise and complete a manner as possible, some trustworthy information in regard to the people, the wealth, and the resources of the island of Java, together with a brief outline of its history. To do this accurately and intelligently, the best authorities have been consulted, not only to verify the author's own experience, but to obtain all possible items of interest bearing upon the purpose in view.

To the work of Sir Stamford Raffles, an acknowledged authority on Java, the author is much indebted.

S. J. H.

CONTENTS

CHAPTER	PAGE
I. EASTWARD BOUND	9
II. THE STRAITS OF SUNDA	15
III. THE FIRST VISITS OF EUROPEANS	21
IV. VOLCANOES, RIVERS, AND GENERAL ASPECTS	28
V. PHENOMENA	36
VI. KRAKATOA	41
VII. SOIL AND CLIMATE	46
VIII. VEGETATION	50
IX. VEGETABLE FIBRES AND DYES	54
X. WOODS AND TREES	57
XI. USEFUL ANIMALS	63
XII. WILD ANIMALS AND GAME	67
XIII. FEATHERED GAME	75
XIV. REPTILES	81
XV. THE POPULATION	87
XVI. HOUSES AND DRESS	91
XVII. FOOD AND COOKING	98
XVIII. AGRICULTURE	101
XIX. COFFEE, TOBACCO, PEPPER, COTTON, INDIGO	106
XX. LAND AND GOVERNMENT	112
XXI. MANUFACTURES AND INDUSTRIES	117
XXII. THE CHARACTER OF THE PEOPLE	120
XXIII. RELIGION AND RANK	125

XXIV. SOME CUSTOMS AND AMUSEMENTS . . .	131
XXV. THE LANGUAGE	138
XXVI. ANCIENT TEMPLES AND PALACES . . .	144
XXVII. EARLY INHABITANTS	154
XXVIII. INTRODUCTION OF MOHAMMEDANISM . . .	159
XXIX. THE FALL OF MODJOPAHIT	163
XXX. ESTABLISHMENT OF THE NEW FAITH . . .	170
XXXI. USURPATION BY THE DUTCH	173
XXXII. THE EMPIRE OF THE DUTCH	178
XXXIII. THE DUTCH EAST INDIES	183
XXXIV. LIFE IN BATAVIA	188
XXXV. TRAVELING IN JAVA	195

JAVA : THE PEARL OF THE EAST

CHAPTER I.

EASTWARD BOUND.

AMONG the many lovely islands that seem to float like gardens of perpetual bloom on the glassy seas beneath the equator, none are so resplendent in wealth and beauty as the island of Java. To distinguish it, and in allusion to its superiority, it has long been termed in the Malay Archipelago the "Pearl of the East," an appellation which its rich and varied resources amply justify.

To reach this land where nature revels in one eternal summer, it is necessary to make a journey half-way round the globe. When one has decided to undergo the wear and tear of such an extended trip, one of the four usual routes, each covering about equal distances from New York, and requiring about the same number of days to accomplish, can be selected. Perhaps the most interesting is by way of San Francisco, and thence by steamer across the Pacific to Japan, China, and

Singapore, the Lion City, situated on an island of the same name at the southern extremity of the Malay Peninsula. Here the English vessel is left, and the traveler commits himself to the care of one of the Dutch or French steamers which ply the Java Sea between this port and Batavia, the capital of the Netherlands Indies, on the island of Java.

Another desirable route is by what is termed the "French Mail" — *Messagéries Maritimes* — from Marseilles, every fortnight, for the French colonies in the East, and China and Japan, which also puts one down at Singapore. The mail steamers known as those of the Peninsular and Oriental Company, sailing every alternate week from England, vie with the French steamers in offering agreeable, if not luxurious, accommodations, and, like the others, abandon the passenger for Java at Singapore.

The Dutch vessels, leaving Amsterdam thrice monthly, present the fourth route, and, as is usual with eastward-bound steamers, go through the Suez Canal; instead of touching at Colombo, on the island of Ceylon, as do the others named, they call at Padang, a Dutch settlement on the west coast of Sumatra. The Dutch government functionaries are sent to the Netherlands Indies by these steamers, which land their passengers at Batavia. This route gives the tourist the chance to pick up a little Dutch and Malay, the two lan-

guages most prevalent in the strange countries whither he is going ; an advantage not to be slighted by one who has ever experienced the utter bewilderment that seizes the stranger suddenly set down in a country and climate that makes demands entirely new, among a people whose language he has never heard, and whose ideas and habits of life are so utterly at variance with his own that by no chance can they make a guess at what he desires. A few words, sufficient to enable him to call a carriage, order a meal, and insist upon a good bed, — the first indispensable under the equator, — will prove of incalculable service to one accustomed to the snip and snap of Western energy, when forced to depend upon the languor and indifference of the Oriental.

Let us suppose ourselves on board the Dutch steamer en route for Java ; the Suez Canal, the swarthy Arabs trotting its banks to keep pace with the steamers, and the intolerable heat of the Red Sea behind us, and we traversing the trackless path of the Indian Ocean to reach the spicy isles on the other side. With what surprised admiration we gaze on the endless waste of shining water, and the gigantic fish sporting beneath its glittering surface ! How we struggle through the sweltering days, wait for the gorgeous sunsets piling the horizon with mountains of golden glory, and enjoy the silvery nights, sheeny with a bril-

liant softness that makes us feel it a sin to go below and shut our eyes in sleep! At the end of three weeks we come into the region of storms and cyclones, where we are treated to claps of thunder, gales of wind, and forked streaks of livid flame to which former experiences of that nature were mere play. Early in the morning we hear a Dutch sailor shouting "Land!" followed by a rush of feet, — every one is running up on deck. "Land! land!" continues the cry, and we follow the crowd to get our first view of the mountains of Sumatra, far away, but rising green and conical into a heaven of purest blue. While we are making inquiries of our nearest neighbor, more than half of the passengers hurry below, to appear again shortly, equipped with bonnets, hats, gloves, parasols, and umbrellas. A sudden plunge — whir-r-r-r — the anchor is overboard, and they are going ashore.

Men, naked except a fragment of cloth drawn around the loins, with lithe, supple bodies and brown skins, and heads wrapped in bright-colored handkerchiefs, paddle towards us in small boats packed with oranges, bananas, strange fruits, cages of brilliant parrots and other birds, and little blue monkeys. "Will Nonya¹ buy?" "Will Tuan² go ashore?" is the burden of their query, in soft voices, and with words that all the Malayu we have learned does not enable us to in-

¹ Lady.

² Gentleman.

terpret. Soon the sales are all made, and the passengers who wish to spend a day on shore manage to get safely down the side of the ship into the little boats, and are rowed into the harbor of Padang, beyond which the town looks like a speck of white against the dark green sloping from the plain that borders the coast, upwards and backwards to the towering summit of Indrapoera.

The heat of that day, on the steamer rocking gently in the water off the coast of Sumatra, is something to think about with tears in one's eyes. Not a breath of wind disturbs the air, and the sun pours down his glaring streams of fire, like devouring blasts from an overcharged furnace. In vain an extra force is ordered to the punkahs, and claret with seltzer drunk by the gallon. The stifling atmosphere will not be cooled, nor the human frame persuaded uncomplainingly to accept the intolerable heat. When the day is over and we are again under way, threading our course clear of the islands that skirt the west coast of Sumatra, what thankfulness fills our hearts! A sudden storm sending us out to sea, our captain heads his vessel for what he terms the southern passage, and the next welcome shout that comes down from above is "Java!" and, as before, everybody hurries on deck, to gaze delightedly on the distant outline of a mountain cone, and later a high black rock called Java Head. We are approaching the entrance to the Straits of

Sunda, through which it is necessary to pass to reach the Java Sea, and finally arrive at the port of Batavia, whither our stanch steamer is bound.

As the white line of sandy beach becomes more distinct, the air grows gradually hotter, a level foreground defines itself, tall palms with bare brown trunks wave feathery tops over the edge of the shining sea, the mountain cone looms clear and distinct above a silvery belt of dissolving cloud, and the dark background changes into a bright and brilliant green. Brown-haired cocoanuts, which we mistake for human heads, bob up and down on the undulating water; branches of palms float past us, and rocks and stones, swimming as airily as empty casks. "What phenomenon is this?" we exclaim, gazing in wonder on the floating lava. "Pumice, Mevrouw, pumice!" answers a voice near us, afterwards explaining how the current in the straits is constantly bearing away fragments of the masses thrown out of the late-belching crater of Krakatoa.

CHAPTER II.

THE STRAITS OF SUNDA.

FAIRLY within the straits, we feel the newness, so to speak, of everything within the range of our vision. We have just passed the low, flat foreground of Sumatra, which stretches away to the left, gradually rising till it is lost in the clouds; and now, our captain having taken what the Dutch call the Behouden, or secured passage, we have the white pebbly beach, waving palms, and occasional glimpses of the rice sawahs¹ of Java on one side, and the rugged luxuriance of Prince's Island on the other.

The latter, lying in the entrance of the straits, forms two passages to the narrow channel. One, the Behouden, running between the island and Java, is used by vessels during the southeast monsoon, when, getting close to the Java shore, safe anchorage can be found, and they are not carried back to sea by the strong currents setting to the westward at this time of the year. The other passage, on the Sumatra side, called Het Groote Gat, or the great channel, is much wider, and is difficult to pass during the southeast monsoon.

¹ Rice fields capable of inundation.

Sailing-vessels, however, coming from the north and west during this season, are compelled to enter the straits by the *Het Groote Gat*, as it is considered almost impossible to gain the opposite or sheltered side in the face of the determined opposition of wind and current.

In this part of the world the year is divided into two seasons, termed the east and west monsoons, or, in other words, the wet and dry. The southeast monsoon sets in about the latter part of November, when the trade-winds blow steadily from the west with great violence; these winds are attended with heavy rains, and continue till March, then they gradually become more pacific, turning in April, and blowing as steadily from the east, bringing dry weather, brilliant skies, and constant sunshine, which last till October. The unsettled intervals between the monsoons are termed the “*kantering*” or shifting months, during which the monsoons break up and the winds change.

To return to our passage through the channel. As we proceed, with Java on our right and Sumatra on our left, the balmiest of balmy breezes salutes our cheeks, bearing odors sweet and delicate from the blooming groves on either side. As twilight comes on, jaunty little green, cone-shaped isles rise out of the water, with long, undulating streams of fire gliding away from their symmetrical base, as the phosphorescent waves, washing

lightly against them, break, separate, and recede, to swell the glittering surface of the placid blue. Gigantic flies hover about our decks, and curious birds follow in the wake of our vessel and perch upon the masts. Southward, long, dark belts of wavy clouds, which we afterwards learn are composed of millions of small blue rice-birds, sail swiftly towards the mountains, the coming gloom speeding them homeward from the rice plantations; while masses of inky blackness gathering around the towering peaks presently burst asunder, revealing streaks of flame, and emptying torrents of rain, which we can distinctly see through the clear atmosphere, though so far away that we are unable to catch an echo from the terrific thunder peals by which they are accompanied.

Soon the spiry summit of Emperor's Island shoots up and is left behind; also the desolate remains of Krakatoa, the precision and correctness of its sliced-off rock looking as if the stroke of a mighty cleaver had split away the absent half, when, with thunderous cannonading, it disappeared, a few years ago, under the water, where we will leave it at present, returning for comment hereafter.

The next island of any importance is "Dwars in den Weg," — thwart the way, — situated in the middle of the channel, and so called because, as approached, it seems to block up the passage,

here fourteen miles wide, between Varken's Hoek, the most extended point of Sumatra, and the opposite coast of Java. "Dwars in den Weg" lies flat on the water, is covered with green, that shines and glitters in the moonlight, and is said to be uninhabited.

The softness and brilliancy increase as daylight entirely fades away, and we seem further to penetrate the apparently enchanted regions whither we are hurrying, while bright points of light beginning to twinkle in the green beyond the white beach line, and the dull, leaden patches clearly discernible among the cocoas and palms, disclose the gray palm-thatch of the Javanese villages, with the further information that we are passing the division of Java still known as the Kingdom of Bantam, celebrated in modern times for the size and ferocity of its tigers, and the persistently rebellious tendencies of its hadjis and princes.

Point St. Nicholas rounded and the Bay of Bantam in our rear, we are traversing the mirror-like surface of the Java Sea, enraptured with the beauty of the scene around us, as we glide past, one by one, the lovely little specks known as the "Thousand Isles" that dot its unbroken calm, and inhale the spicy perfumes wafted towards us from their mysterious depths. On our right, the thread of silvery beach is still clearly visible; beyond it is a flat foreground, which forms a bor-

der two or three miles in width along the coast, and gradually rises to the crests of a mountain chain, extending east and west as far as we can discern, presenting a succession of symmetrical cones, rising as we speed along, one beyond the other, into the clear moonlit blue. Spiral columns of cloud or smoke curl heavenward from the apex of one or two, which leads to a discussion between two Dutchmen as to whether it proceeds from the crater of a volcano, or is the accumulated vapor from clouds invisible behind the towering crests.

A long train of watery fire boils and bubbles in our wake, and the little black dots of islands still come into view and pass out of sight, while the moon, seemingly multiplied a hundredfold in size and brilliancy, sails above our heads in a sky of deepest sapphire and with the stars, also fabulously resplendent, bestows a light so lucid and luminous that we test it by reading with ease a page of medium print in a book. Huge turtles float like cheese-boxes on the shining surface of the water. Serpents, many yards in length, swim with heads erect; silvery fish spring out of the depths to skim over the glassy wave, then sink again out of sight; and night-birds suddenly swoop down upon us, and, circling round our decks, sail away towards the black shores with an unfamiliar cry.

Still speeding forward, and sometimes getting near the shore, we catch faint strains of soft,

melancholy music, and can distinguish the long lines of cocoanut-trees, leaning their bunchy tops out over the water, with huge fireflies spasmodically lighting up the black shadows on the brink beneath. Enveloped, as it were, in magical beauty, we determine, with several others, to get all we can of the glory by passing this, the last and most lovely night of our voyage, in great arm-chairs on deck; allowing, in our dreamy enjoyment, the perfumed breeze to fan our faces, and, contrary to our intention, beguile us into sleep.

A second whir-r-r-r harshly breaks in upon our slumbers, when, hastily springing to our feet, we are amazed to find, instead of the silvery softness of the brilliant moon, the first streaks of early dawn, and close beside us a guard-ship with the Dutch ensign floating from her mast. With regret we perceive that our long voyage is over,—our anchor has dropped in the roads of Batavia. In the distance, catching the first rays of the early sun, we see some long, low white buildings, the outposts, we are told, of the beautiful capital of Java, acknowledged by all who have ever visited her to be justly entitled to her ancient cognomen of “Queen of the East.”

CHAPTER III.

THE FIRST VISITS OF EUROPEANS.

SOME geographers tell us that Java is one of the Sunda Islands, others that it forms one of the Malayan group. In either case, it belongs to the East Indian Archipelago, lying in that distant and mysterious part of the world called Oceania, and is one of the largest, and by far the richest, the most beautiful, the most highly cultivated, and the most improved, among all the dots of perpetual verdure that comprise the Asiatic isles.

The natives call it "Jawa" instead of Java, a name supposed by some to be taken from that of a grain called Jawa-woet, which grew plentifully upon the island in earlier times. Others assert that the word Jawa is a perversion of the Sanscrit word Yava, — barley, — because Java has sometimes been termed the land of barley; and again, that it is derived from the word Jau, — the land beyond or very distant.

It is situated south of the equator, between $105^{\circ} 10'$ and $114^{\circ} 34'$ E. long. and $5^{\circ} 52'$ and $8^{\circ} 46'$ S. lat. Its length from Java Head on the Straits of Sunda to East Point on the Strait of Bali is 666 statute miles. Its greatest width is 135

miles, its narrowest limit 56, and its area 51,350 square miles. On the east it is separated by the Strait of Bali (ten miles wide) from the island of the same name, and on the west the Straits of Sunda flow between it and the island of Sumatra. The placid waters of the Java Sea lave its palm-fringed coast on the north, while the high cliffs that guard the south coast are ever washed by a long line of dangerous breakers, formed by the inrolling waves of the Indian Ocean. The population is 22,000,000.

Before the Mohammedan conquest of Java, in 1400 of the Javan era,¹ the whole island was under the dominion of one sovereign. It was subsequently divided between two independent nations, and later into several distinct kingdoms. After the Europeans came into power, the northern half of the island was divided into fifteen residencies, which have been added to, till at present there are twenty-five, each having a separate administration, but all subject to the government of one central authority.

In the year 1510 of the Christian era, the Portuguese first arrived in the East Indian Archipelago. In the following year their chief, Alphonzo d'Albuquerque, subjugating the city of Malacca, invited the trade of the surrounding islands, promising them protection, and opened an intercourse with Java. Nakoda Ismael, a

¹ About seventy-five years later than the Christian era. See page 157.

Moor, who had trading relations with Malacca, in returning from the Moluccas with a cargo of nutmegs was wrecked on the coast of Java; but succeeding in saving his cargo of spices, the governor of Malacca, in the year 1513, sent a commander with four vessels to obtain it. This little fleet was well received by the Javanese, and the Portuguese, continuing to trade with the spice islands, generally touched at the ports of Java, which led to a treaty of friendship between the governor of Malacca and the king of Sunda (a western division of Java), on account of the pepper produced in that kingdom. The advantages of trading in the East soon attracted the attention of other European powers, and the Dutch and English soon followed the Portuguese. Accounts of the first two, as given by Sir Stamford Raffles, governor-general of Java under the English administration, read as follows:—

“The first voyage made by the Dutch was in 1595, in which year their first fleet, under the command of Houtman (who had been previously employed by the Portuguese in the East India service), sailed direct to Bantam. At this period the Portuguese were at war with the king of Bantam, to whom Houtman offered assistance, in return for which he obtained permission to build a factory¹ at Bantam, which was the first settlement by the Dutch in the East Indies.

¹ Trading station.

“Following the example of the Dutch, the English East India Company, immediately after their incorporation by Queen Elizabeth in 1601, fitted out a fleet of four ships, the command of which was intrusted to Captain Lancaster, who sailed from London in 1602, first to Acheen (Ach  ), on Sumatra, where he procured part of his cargo, and entered into a treaty with the king, of which a copy is yet in existence. From Acheen he went to Bantam, and settled a factory there, which was the first possession of the English in the East Indies. Captain Lancaster brought home a letter from the king of Bantam to Queen Elizabeth in 1602, which is still in the State Paper Office. In 1610, the first Dutch governor-general, Bolt, arrived at Bantam, and, finding the situation of his countrymen in that province not favorable to the establishment of a permanent settlement, removed to Jakatra. On the fourth of March, 1621, the name of Batavia was conferred upon the new establishment of the Dutch in Jakatra, which from that period became the capital of their East Indian Empire. In 1683, the English, who had maintained a successful rivalry with the Dutch, withdrew their establishment from Bantam.

“In the year 1811, Holland having become a province of France, the French flag was hoisted at Batavia; and on the 11th of September, in the same year, the British government was declared supreme in Java, by a proclamation of

that date signed by the Earl of Minto, governor-general of Bengal. On the 17th of the same month, a capitulation was entered into, by which all the dependencies fell into the hands of Great Britain. On the 13th of August, 1814, a convention was entered into by Viscount Castlereagh, on the part of his Britannic Majesty, restoring to the Dutch the whole of their former possessions in the Eastern Islands; and on the 19th of August, 1816, the flag of the Netherlands was again hoisted at Batavia."

The loss of Java at that time was not considered a calamity by the Dutch, for the previous ruin of the Dutch East India Company had rendered it a burden to Holland. In short, the Dutch possessions in the East had such an untoward financial and commercial outlook that their conquest by England, although very mortifying, could scarcely be regarded as a national misfortune. The transfer, however, was only temporary. Since the 19th of August, 1816, the possession of the island has remained with the Dutch. In 1619, a succeeding governor-general, John Pietersen Coen, quite destroyed the town of Jakatra, and established another city on the inland site of the old foundation, on a spot which he considered more healthy, and proposed to call it New Horn, after the town of his birth, in Holland; but it was christened Batavia, March 4, 1621, and became the capital of the Dutch East

Indian Empire. The southern half of the island passed under the Dutch Protectorate in 1749, according to a treaty bearing that date, and was divided into the two native kingdoms Soerakarta and Djokjokarta, both governed by native sovereigns, under the espionage of the Dutch.

The principal cities and seaports are those of Batavia, Samarang, and Soerabaja on the Java Sea. The two last-named cities are handsome and well laid out in clean wide streets and fine squares, and are adorned with many spacious and imposing buildings. They possess a number of sumptuous private dwellings surrounded with beautiful grounds, the homes of high Dutch functionaries and rich merchants who are fond of the Oriental luxury of the East. Batavia, however, the seat of government, far exceeds the others in grandeur and magnificence, and is, in truth, one of the most beautiful cities in the world. Here the successful European, attended by a retinue of servants, dwells in a degree of splendor that would dazzle the eyes of his poorer relatives at home.

Buitenzorg — meaning without care, and thus named by a Dutch governor-general — is a lovely suburb some thirty-six miles south of Batavia. It is celebrated for its magnificent botanical garden, and for being the country-seat of the Governor-Generals of Java. The garden is said to be the

finest and largest botanical inclosure in the world, and contains specimens of every known variety and species of tropical plant. It quite surrounds the palace of the Governor-General, which with its dependencies and a number of handsome private residences comprise a town beautifully situated on the side of one of the sloping spurs of the Gedeh. A short distance below the village the descent meets the base of the Salak, which slowly rises opposite till its battered rim is capped by the gathering clouds. The fires of the last-named volcano have long been dormant, but the Gedeh gives notice of its ceaseless activity by mighty tremors and thunderous rumblings at short intervals. The government cinchona nurseries are at Buitenzorg.

There are many other pretty towns in Java, especially on the northern coast, where are also excellent harbors. Notwithstanding the dangerous swell that breaks on the southern coast, it possesses two or three points, for instance Patjitan, Tjilatjap, and Wynkoops Bay, where good anchorage might be obtained if the government deemed it advisable to attract to that exposed side of the island the enterprising and adventurous spirits who seek fortune in Eastern seas.

CHAPTER IV.

VOLCANOES, RIVERS, AND GENERAL ASPECTS.

As we ascend towards the interior of Java the scenery is lovely and majestic beyond description. An unbroken chain of pyramidal cones, ranging from three to thirteen thousand feet in height, extends through the centre of the whole length of the island. There are forty-seven distinct mountains, each rising from a round and separate base, seventeen of which are active volcanoes.

The Karang, which we saw while far out at sea and as we approached Java Head, is the first of the series on the west. Then follow the Salak, the Gedeh, the Sindoro, the Tankoeban-Prahoë, the Oengarang, Merbaboe, Merapi, Arjuna, Sermiroë, and Tagal, succeeded by many others. Those named are some of the volcanoes, varying in elevation from eight to thirteen thousand feet, the Sermiroë being the highest. The bases of these gigantic and symmetrical elevations are almost level with the sea; their sides, sloping upwards to their pointed summits, are covered with rich plantations and forest jungles nearly to the throats of their gaping craters, some of which

continually send forth smoke and sulphurous vapors, while others are supposed to be extinct.

Eruptions in these regions, where the earth's crust is so thin that it cracks and splits without apparent effort, cause but little alarm, unless attended with copious and violent expulsions of ashes, stones, boiling water, and lava, which suddenly overwhelm and submerge the surrounding districts. The inhabitants, always apprehensive, take the precaution of erecting their dwellings with one story, to avoid any unpleasant toppling of their domiciles about their ears. Some of the craters are filled with water, which constantly boils up from below. One especially, the Bromo on the Teng'gers, has a lake of boiling sulphurous mud.

Thousands and thousands of human beings have perished by earthquakes in Java, but where the population is so dense, life is held very cheap, and as long as only natives or native villages are destroyed, very little is said. It appears to be the policy of the government to suppress the circulation of disturbing news. The Papandajung, a mud volcano, situated in the district of Cheribon, was formerly one of the largest volcanoes on the island; but in the last century more than one half of it, covering an area fifteen miles long and six broad, was suddenly swallowed in a stupendous combustion, which at the same time gulped down and otherwise annihilated some

forty native villages, with many valuable coffee, cotton, and indigo plantations in its adjacent neighborhood, and a corresponding number of cattle.

The summits of these cones are composed of naked rock or ice, or they are covered with vegetation, the jungle often reaching to the very brim of the crater. Boiling streams, which have their origin in the fiery depths of the craters, or apertures that gape on their tops, rush down their teeming declivities, not infrequently side by side with streams that are clear and icy cold, bearing the drainings of the hail and snow above. Nearly all the volcanoes are striped with vertical ridges, which become beds of rivers during the rainy seasons.

Besides the high mountains just mentioned, there are many chains of smaller elevations, extending in various directions, and forming low, separate, and independent ranges, some of which bear evidences of volcanic origin and others of submarine construction. Many are covered with large rocks of basalt; some are of calcareous constitution, and in the beds of the rivers about their base flint, jasper, agate, carnelian, and porphyry are found.

The limited area of the island does not admit of any long or very powerful water-courses, yet, such as they are, they are abundant, and very respectable in length, depth, and width; all flowing

from the mountains towards the sea on both sides of the high central volcanic crest, and each increasing fabulously in strength and volume during the wet monsoon. The Solo is the largest and most important river on the island. It has its source among the hills in the interior district of Kadawang, and flows in an easterly direction before emptying itself into the sea near Soerabaja. Its length, owing to its extraordinary doubling upon itself, is about 360 miles, while the actual distance from its source to the sea is not over 140. Soerakarta, the capital of the Soesoenan (highest native sovereign), is situated on the Solo River.

The navigation of the Solo is of the utmost importance to the inland trade, which depends upon its waters to float the industry of the villages and the produce of the country to the seaport. During the rainy season the boats that ply the stream are of a considerable size, but have to give place to those of much smaller dimensions when the swollen stream shrinks during the dry monsoon to less than one half its former proportions. Vessels float with the current from Soerakarta down to Gresek, on the east coast, in seven or eight days, carrying the spices and coffees of the interior, which are exchanged for salt and various desirable articles of foreign importation to transport inland. This sort of trade may appear very profitable, but as it requires four

months to beat up the stream again to Soerakarta, only one voyage can be made in a season; therefore all the profit goes to pay for the time spent!

All the rivers in Java partake of the general characteristics of the Solo, each rising somewhere in the mountains in the middle of the island, and flowing either on one side or the other, to the sea, bearing the products of the interior. Some of those that seek the coast on the southern side are choked up at the mouth with banks of sand, forced therein by the heavy surf of the Indian Ocean. On the northern coast, the mud and soil are carried down from the rice districts, and are arrested at their débouchure by the opposing waters of the Java Sea, forming a bar, which is overcome by projecting piers, built to facilitate easy entrance.

Extensive swamps spread over large districts in various parts of the lowlands of Java, and are utilized by being converted into rice sawahs, where an abundance of mud and water is necessary. These mud flats are drained, cultivated, and inundated at will, and thus rendered useful and absolutely indispensable to the support of the millions that crowd the island and subsist entirely on rice. The country is almost destitute of lakes of any size, though there are several small bodies of fresh or sulphurous water shining here and there among the mountains, that are generally supposed to be the depressions of

extinct volcanoes since filled up with water from beneath. Some have no apparent outlet, neither do they receive the accumulations of any visible stream.

As we descend the mountains towards the Java Sea on the northern coast, the aspect of the country, as we approach the water, is low and flat, but to reach it we must pass through some of the most romantic and magnificent scenery in the world. Waving forests, cloud-capped mountains, rushing streams, silvery cataracts, sparkling pools, and shady groves alternate with teeming plantations of rice, coffee, tea, cinchona, cocoanut, banana, orange, lime, and pineapple, which are presided over by the sovereign planter, who lives as a prince in a palace-like bungalow, with hundreds or thousands of humble natives who are willing to kneel at his nod. Add to the foregoing the inspiring delights of the pure atmosphere, the brilliant tints of the tropical sky, the glowing warmth, the redundant life, perpetual bloom, and unfailing perfumes saturating the ceaselessly soft and balmy breeze, with its seductive and intoxicating influences, and we have a condition of life not easily described, and one that is particularly charming to the visitor from colder zones, when contrasted with the stunted growths and, by comparison, barren fields of northern latitudes. With what wonder, delight, and admiration the traveler from hardier climes

regards this palpitating, voluptuous beauty! How he longs with all his heart to transport it, with its brilliant life, warmth, and dreamy glory, to the less inspiring but more energetic regions that form his own temperate home!

Tobacco, tea, coffee, and various luscious fruits that require a colder climate than prevails in the low regions near the coast, are extensively cultivated on the broad plains and plateaux discovered far up on the mountain sides, between the vast forests that cover the uniform declines. Jungles of rank and impenetrable growth are found everywhere: on the mountains they are coverts for wild beasts; on the plains, the abode of dreaded reptiles and noxious insects, their morassy foundations furnishing the most prolific propagating grounds.

Rice, sugar, and cocoanuts are the principal important productions cultivated on the lowlands skirting the sea-coast. Advancing from the latter towards the interior, the heat and sultriness are gradually exchanged for the bracing and refreshing currents of mountain air, which grow more cool and invigorating every step we take, till at last we encounter the cold winds of the north, and see around us the rugged oaks and stunted and meagre shrubbery of a northern clime. In a few hours' travel, a climate of any temperature may be found. If we continue our journey and reach the summits of the highest peaks, the cutting

blasts of Arctic regions will make us wish for furs and blankets, while we shiver around a blazing forest fire, or thankfully cuddle up in a well-warmed mountain hut, escaping the gales outside with infinite relief and satisfaction.

CHAPTER V.

PHENOMENA.

AMONG the endless varieties of phenomena that hourly meet the astonished gaze of the traveler in Java, the hot wells may be mentioned as one of the most singular. Those that are most accessible and most frequented by tourists in search of the curious are situated in the province of Cheribon, in the midst of a plain that is perfectly white from the coating laid on by the sulphurous vapor constantly rising from its porous surface. The water in these wells maintains different degrees of heat below boiling, and their sides are white with chalkstone incrustations, which also extend over the trees in their vicinity, from the branches of which they are often suspended in the form of snowy stalactites. Calcareous formations abound throughout this region, and rocks covered with beautiful crystals of calc-spar are sprinkled over the plains and valleys. Petroleum is likewise abundant in this district in depressed spots, where the oil floats in patches upon the water, emitting its unmistakable odor. The ground about these depres-

sions is thoroughly impregnated with oil, which can be pressed from the earth with the hand.

In certain vicinities in the eastern interior of the island there are a series of mud wells, termed *Blédeg*. The mud is warm, but not hot, and is frequently mixed with salt, which causes the *Blédeg* to be sometimes spoken of as salt wells. In some cases salt water alone is forced up through the apertures in the rocks, with considerable violence, but generally the term *Blédeg* is applied to salt mud, sometimes in wells or separate masses. In one instance the mud forced up by the gas underneath rises regularly at short intervals in a spherical mass, which explodes, spreading itself in all directions. These warm and palpitating mud hills are distributed in a circular plain impregnated with oil and salt, and their explosions are said to increase in frequency and violence during the rainy periods. They are said to owe their origin to the general volcanic proclivities that distinguish Java and the surrounding islands. Gaseous mud and gaseous wells of different kinds are quite common. In one locality there are gas fountains, which shoot their blazing vapor far up into the air, and are regarded with reverence by the natives, who give them the name of Holy Fires.

In no part of the world are volcanic formations more apparent than in the Sunda Isles, which continually present the most curious erup-

tive phenomena. The volcanoes of Java and those of her neighbors display the most vindictive spirit, and seem to delight in venting their ire in frequent earthquakes, and, at intervals, violent expulsions, spreading terror, death, and destruction for miles around; such was the character of the outburst of the Tambora in 1815, on the island of Sumbawa, which is very close to Java. Such, also, was the recent eruption of Krakatoa, in the Straits of Sunda, and the outbreak, in 1886, of the Sermiroe. The Sermiroe exhibits an extremely singular phenomenon. It is high, narrow, and very pointed towards the top, from which smoke issues all the time, and every morning, at about eight o'clock, it shoots upward with great force an immense quantity of smoke and ashes, sometimes accompanied with stones and rocks, which fall back, and roll down the mountain side.

The Bromo, or Brama (from the god of fire), on the Teng'gers mountain range, is the most interesting volcano in Java. It is situated in the centre of what is known as the Sandy Sea, which is simply the denuded bottom of an extinct crater, the sand of which, when blown by the wind, takes the appearance of rippling ocean waves. The Sandy Sea is eight hundred feet below the surrounding brim, and five miles in diameter, and is supposed to be the largest crater in the world. Three separate cones rise from its centre, one of

which is covered with vegetation around its base. The central cone is destitute of everything green, and has a black and burned appearance. This is the Bromo, from which volumes of smoke constantly issue with considerable noise.

After descending into the Sandy Sea, which appears to be hollow beneath, and, when stepped on, emits a sound similar to that which one might expect to hear from footsteps on the head of a gigantic drum, the base of the Bromo is approached with some apprehension. A little courage, however, and the charred sides can be climbed, and a look down into the boiling crater, whence the noise and smoke proceed, be obtained. As the cone is ascended one can feel the ground tremble, and the noise becomes terrific, while the smoke and sulphurous odors, forcing their way through the fissures, accompanied with threatening roars, seem to warn the curious investigator away. From the brim of the crater one can look down some two hundred feet on the boiling mass filling the bottom below, which is about four hundred feet in diameter. It is yellow and thick, and boils up constantly in huge bubbles, which rise like domes some thirty or forty feet in circumference, and then explode, scattering the yellow liquid in every direction. This continues without intermission. The venturesome sometimes descend towards the bottom on the windward side, with the assistance of a rope, and let a flask attached

to a string down into the seething fluid ; when this is carefully drawn up again, and allowed to cool, they have a souvenir enameled with a vivid yellow substance, which retains its color and will not wear off. To descend into the crater of the Bromo, however, is very dangerous. Many of the natives on the Teng'gers still retain some of their ancient Hindu superstitions, and go down into the Sandy Sea, spread their mats on the sand, kneel, and worship the fiery Bromo.

CHAPTER VI.

KRAKATOA.

THE bursting of Krakatoa, August 26-27, 1883, was one of the most gigantically disastrous events in its results that has ever been recorded in the history of our globe. It was not only appalling in its immediate neighborhood, where it caused a thick and terrible darkness to obscure the sun, but on the adjacent shores of Java and Sumatra 36,500 souls perished in the inundation or tidal wave forced up on the coasts, and originated by the submarine upheavals. The phenomena of its effects are alleged to have extended to all parts of the world. The brilliant tints and glowing hues seen in the skies at sunrise and sunset, in both hemispheres, during the following year, were imputed to the eruptions of Krakatoa. To give to the world an intelligent understanding of the phenomena scattered broadcast by the shock of Krakatoa, the records of magnetic needles, barometers, thermometers, and ship captains' logs were sought for all round the earth, the laws of optics and acoustics tested, the sciences of astronomy and meteorology considered, the effects of light,

shade, and color applied, the invisible attractions of magnetism and the unseen forces of electricity conceded, the laws of hydrography harmonized, and a book of nearly five hundred pages was written in elucidating and proving the magnitude of the tremendous outbreak.

Krakatoa, as has already been stated, is a small island situated in the middle of the Straits of Sunda. Before the eruption, it was about 3000 feet high, and covered with vegetation ; its coasts were a resort for fishermen, otherwise it was said to be uninhabited. It is an old offender. Accounts are not wanting, though meagre, of eruptions which destroyed its forests some two centuries ago, and covered the surrounding seas with shoals of floating pumice ; since which period, till the recent outburst, its fires had slumbered in peace, and the repose of its rocky crests remained undisturbed.

Krakatoa threw out premonitory warnings for several months before engaging in its late effective work : rumblings were heard a hundred miles distant, columns of steam were projected from its summit with great noise, and vast quantities of dust were expelled and carried by the wind beyond the coasts of Java and Sumatra. In a country, however, where the internal machinery of the volcanoes is always complaining, and where convulsions in nature are common occurrences, these preparations received little serious attention.

So the commotion on Krakatoa continued without causing alarm till near the 26th of August, when the detonations became louder and more rapid, and the showers of ashes heavier and more frequent, while the heavens gradually grew black and overcast. At last, profound darkness settled down upon the adjacent waters, and enveloped the surrounding islands at noonday, while the agitated waves suddenly piled themselves into stupendous perpendicular banks, which rolled in upon the neighboring coasts, destroying and sweeping away the villages and towns, with all their inhabitants.

On the morning of August 26, 1883, the captain of a ship, some seventy-five miles distant, measured the columns of smoke and steam issuing from Krakatoa, and found them (at that distance) to be seventeen miles high. As the day wore on, the reports of the explosions were heard all over Java, and on the surrounding islands as far as Macassar and Acheen, about one thousand miles away. The captain of a British vessel that was compelled to cast anchor in the Straits of Sunda the preceding night, about ten miles from the upheaving volcano, gave a thrilling account of the fearful experiences on his ship. Warm pumice-stone rained down upon the terrified sailors, and the air was hot and heavy with sulphurous odors, and thick with dust and ashes. The plummets cast overboard came up hot from the

bottom of the sea, and columns of black smoke, illumined by flashing sheets of electricity, shot upward from the angry mountain and assumed gigantic proportions in the weighted air, while the concussions followed each other so rapidly that the noise was a continuous and deafening roar.

The residents of Batavia, ninety-six miles distant, were kept awake that night by the thunderous cannonading from the volcano, the rattling of their windows, and the breaking of glass. The vibrations of the air and the tremblings of the earth knocked down some of the stone pillars that supported their verandas. The next morning (Monday), four explosions, more violent and terrific than had yet been heard, succeeded each other, with ejections of vast quantities of dust and ashes from the mountain, which reached Batavia, and spread a mantle of gray over the streets, producing darkness till three o'clock in the afternoon, when the tremendous detonations gradually became lighter, ceasing altogether at two o'clock on Tuesday morning.

The gigantic tidal wave extended to Batavia, submerging the streets in the low part of the city, near the coast, and backing up the rivers for some distance. When all was over, it was discovered that one half of Krakatoa had disappeared; the surrounding coasts were completely devastated, and the destruction of human life, property, and cattle was enormous. Vessels had

been lifted by the mighty tidal wave, transported some three miles inland, and left, as the waters receded, high and dry on the mountain side, where one man-of-war remains to this day.

According to authentic records, the horrors of the bursting of Krakatoa, aside from the destruction by the tidal wave, were surpassed by the combustion of the Papandajung, on Java, in 1772, and also by the eruption of the Tambora, on Soembawa, in 1815. We have no account, however, in the history of the world, of such mighty throes, terrific sounds, and stupendous sea waves as were originated by the late convulsions of Krakatoa.

CHAPTER VII.

SOIL AND CLIMATE.

IN a country like Java, so amply provided with rivers, mountains, and volcanoes, the mineralogist might reasonably expect to find rich deposits in metals, minerals, and precious stones. With the exception of coal, this has not been the experience of the ambitious prospector in Java. In vain has he penetrated the rugged seams and flinty chasms that scar the mountain side, searched the deep caverns and gaping crevices that appear to speak of hidden wealth, and dredged the beds of the yellow rivers, forever washing down the crumbling rock and soft earth from the promising heights above. Neither gold, nor silver, nor rare crystals, to any appreciable extent, have ever been found, nor mineral deposits, except coal, discovered, that seem to warrant the expense of organized excavation for the sake of profit. The wonderful fertility of the soil may afford compensation for the deficiency of Java in this direction. Her preëminent growths and rapidity of production may perhaps be regarded as nature's requital for treasures wanting in less bulky form.

That everything will grow on this beautiful island is considered an established truth. A seed, slip, or branch, dropped carelessly on the ground, will take root, and soon shoot into flower or fruit. The fructifying black loam, resembling rich garden mould, only waits the opportunity of showing its power to renew and increase. It is well known that the rich products of Java are distributed in all the markets of the world. Her coffees, sugars, and spices float on every sea, and neither their superior quality nor their abundance can be disputed.

The unexampled prodigality of nature in Java, in which we include the productiveness of the soil, deprives the native of an incentive to industry, by relieving him of the necessity of exertion to assure himself of a future subsistence, and has perhaps more to do with his natural indolence than the climate to which it is imputed. He leaves to the generous soil and perpetual warmth the drudgery that falls to the lot of the successful husbandman in less favored climes, knowing, from his own experience and the records of ages that have gone before him, that he will not be disappointed. His seed once cast upon the soil, he looks confidently forward to teeming plantations, reckoning without fail the product of his paddy fields, the juice from his sugar-canes, and the coffees and spices from his shrubbery.

From April to October he revels in perpetual

sunshine, with occasional light showers, which refresh and invigorate his fields and insure him abundant crops. From October to April, when the gates of heaven open and seem to let down avalanches of water, vegetation runs wild, and if he then labors in the field it is to keep down the rampant growths. During this period (the rainy season), the sun shines always during a portion of the day, generally in the morning; and this, with the porous nature of the soil, prevents the fields from becoming pools of mud, preserves the roads in good condition for travel, and keeps the villages and plantations on the plains from being submerged. The otherwise excessive heat at this season of the year is modified by the daily down-pour, which, with the cooling showers in the dry monsoon, and the alternate land and sea breezes which succeed each other with unfailing regularity, renders life comfortable the year round.

The sea breeze sets in about eleven o'clock in the morning, gently increasing till late in the afternoon, when it dies away, and a perfect calm succeeds, which lasts till nearly midnight, when the land breeze gradually comes on, and continues till about eight o'clock the next morning, to be replaced by the repose of the night before, which is again succeeded by the sea breeze at its appointed hour. This perpetual exchange of cool and fragrant air from the mountains, with refreshing draughts impregnated with salty moisture from

the sea, promotes health and relieves the intense heat.

Violent winds, hurricanes, or storms partaking of that character, are unknown in Java. In the vicinity of the mountain tops, however, rains attended with terrific peals of thunder and blinding bursts of lightning are frequent, and are sometimes accompanied with light tremors of the earth, proceeding from some internal disturbance of the nearest volcano, which goes for nothing unless it increases till the chandeliers begin to swing, when the inhabitants immediately rush out of their dwellings, fearing the latter may be demolished by a sudden tilt or see-saw of the ground beneath.

It is alleged that there are few countries more salubrious than Java. For those who avoid excess in eating and drinking, and refrain from exposure after sunset to the noxious exhalations from the salt marshes near the sea, there is nothing to fear from climate or seasons. During the heat of the day, the European is compelled to avoid the direct rays of the sun, though the native trots all day long under its scorching rays, with his head protected only by the folds of a cotton handkerchief, without experiencing any deleterious effects whatever, while to the European sun-stroke, insanity, or death would be the consequence.

CHAPTER VIII.

VEGETATION.

THE diversity of climate in Java produces a richness and abundance in the vegetable kingdom that is unequaled in any other part of the world within an area so limited. As we advance inland from the coast, the temperature changes at the rate of three or four degrees for every ten or eleven miles, producing six different climates between the sea and the summits of the mountains, each presenting its own peculiar type of verdure in various stages of development, also its diverse degrees of developed luxuriance; plainly showing that every herb, shrub, plant, or tree that ever pushed its head above ground finds a welcome and nourishing home on some part of the island.

When we behold the profuse variety and marvelous exuberance and redundancy of verdure forcing itself into the persuasive and invigorating sunshine, we believe the statement that nowhere on the face of the earth can we find such glowing, drooping beauty in foliage, such magnitude in leaf and flower, such delicacy in vine and stem, such diversity and brilliancy in

green, such multiplicity and extension in shoot and branch, such height and symmetry in trunk and top, such variety and abundance in size and species, as are presented in the plains and forests of Java, a description of which would prove an endless if not an impossible undertaking.

Here the delicate cobwebby fern attains the proportions of a gigantic tree; the orange, lime, banana, cocoanut, clove, allspice, cinnamon, nutmeg, pepper, tea, and coffee luxuriate in groves of incomparable beauty; and the beautiful palm is divided into dozens of varieties, of which the cocoa-palm, the plantain, the betel-palm, the sugar-palm, the fan-palm, the wax-palm, are the most valued. Then we have the crowded forests of teak, the tall mahogany-tree, the sandalwood, rubber, and camphor trees, the creeping rattans, the spreading thickets of bamboo, with the hundreds of fancy woods both rare and valuable, and the numberless varieties of fruit-bearing trees, besides the illimitable species of vines, vegetables, and flowering shrubs, to be named by thousands and requiring volumes of description.

The cultivation of rice, sugar, tobacco, cinchona, and coffee is the principal agricultural occupation, though the spice productions make a most important factor in commerce and furnish a large revenue. Of fruits there is also a great variety, many of them unknown beyond the archipelago, and some of them truly delicious, such as the

orange, cocoanut, banana, durion, rambutan, blimbing, guava, mango, custard apple, pomplemoes, and manggistan, the latter usually esteemed the most luscious of all. From fruits we naturally come to the fragrant grasses that sometimes cover the ground on which they fall, and the lovely blossoms that brighten the dark green lustre of the foliage that conceals the branches whereon they hang, and bring out in richer tints the yellows, pale greens, glowing browns, bright purples, reds, and crimsons, pale golden and delicate straw colors, by which their juicy ripeness is distinguished. The aromatic grasses of Java are famous, especially one species called "bintara," which is much liked by the Javanese, and in great demand for perfuming their clothes, couches, and apartments.

It is impossible for any one but an accomplished botanist to dilate upon the brilliancy and diversified redundancy of the flowers with even a shadow of justice. Some are so soft and delicate in color and texture that one cannot breathe upon them without destroying their airy loveliness; others are so gorgeous and gigantic that it quite dazzles the vision to look at them; some b'oom during the day, some only at night, some in the morning, others in the evening, and many bloom perpetually, the blossom continually succeeding the bud, and the bud the blossom. Many are entirely devoid of perfume, and numbers saturate

the surrounding air with their delightful fragrance, and make their presence known by the delicious odors that pervade the neighborhood.

Those most prized for their perfumes bloom throughout the year, among which the double tuberose, the Arabian jasmine, and those known by the Javanese names of "nagasari," "tenyong," and "champaka," are the most noticeable favorites. The Javanese strew these beautiful blossoms about their rooms, and over their beds and furniture, and throw them in the water stored for bathing, thus extracting their sweetness, and scenting everything with their exquisite perfume.

The colors of these treasures, made cheap in Java by their abundance, are as varied as their size and habits. The rose-white blossom of the *Victoria regia* here attains a diameter of two and three feet, and its great round leaves measure five feet across their centre, with a turned-up brim of five inches. The waxy magnolia reaches correspondingly gigantic proportions, as do many others, like the oleander, which becomes a tree, waving its clusters of pink and white flowers beside the public highway.

CHAPTER IX.

VEGETABLE FIBRES AND DYES.

THE Javanese manufacture several kinds of cord and cloth from various fibrous substances, which they call "loeloeb," obtained from the internal bark of several species of trees, and from the tendinous element in numerous vegetable leaves; the leaves especially of the banana and pineapple are valuable for these purposes; the rope termed "coir," admitted to possess superior strength and durability, is made from the wiry tissue that surrounds the cocoanut, whose fibre is celebrated for its toughness and adaptability.

Loeloeb is also procured from several species of the palm. It is collected from trees in their wild state, and prepared by first beating and pounding the original substance, then separating it from the adhering particles, after which it is twisted by the hands into thread, cord, and rope. An extremely strong and thin gossamer fabric, which is very pretty, and much used by the natives throughout the archipelago, is made from the delicate fibre of the pineapple leaf.

Before the importation of European manufactures, and even yet in the interior districts, the

Javanese made their paper from the paper-tree, which they cultivate. The bark is peeled from the tree when it is about three years old, cut into pieces the size of the sheets required, and soaked in water till the outside bark easily separates from the inner fibre, when the latter is again soaked, pounded, re-soaked, and beaten with a piece of wood, till it is soft and pliable, after which it is deposited in troughs of cold water and freed from all loose fragments. The pieces are then stretched on a smooth surface, the thin places covered with fresh layers, and the whole pounded into a consistent thickness. If large sheets are desired, the edges are overlapped and beaten till they adhere. The quality of this paper depends upon the care and the abundance of water used in its preparation. It is strong, soft, and silky to the touch, and when intended for writing is made smooth and glossy by being dipped into a thin rice-water liquid and rubbed till it attains a polished smoothness.

The long slender leaves of the palm and the lengthened blades of several species of grass and of rattan furnish the material for weaving and plaiting mats (always by hand), which are so extensively used by all classes that they may be named as a necessity of the country. The grass called "mendong" is used for the coarser kind of mats, and is woven into bags and sacks used for transporting coffee, rice, etc.

We may say here that the handsomest mats, and those of finest quality, are made in the Soerabaja district. A mat made in Pesantran is highly prized, and among the upper classes a couch or bed, soft and springy with repeated layers of the Kloso-Pesantran, is deemed an enviable luxury, the possession of which enters largely into the requirements of a well-furnished Javanese house.

The native hats, resembling in size and shape a reversed umbrella, are plaited from thin, tractable slats of the universally applied bamboo. Bright and permanent dyes of varied colors are obtained from an admixture and infusion of certain kinds of bark and fruit, and some from the maceration of particular roots with the chaff of rice. The beautiful blue and deep scarlet obtained in this manner never fades or washes out. An exquisitely soft and rich color is procured from the mixed bark of the marka and the mango tree, and an infusion of the bark of the tangi with the deep purple rind of the manggi-stan yields a beautiful black dye. A lovely and durable scarlet is also obtained by bruising and boiling down the roots of the wong-koedoe.

CHAPTER X.

WOODS AND TREES.

A GREAT many varieties of wood, of which the teak is the most useful and important, are found in Java. Immense tracts in the central interior are covered with dense forests of teak, which are said to produce the hardest and consequently the most valuable timber. Though there is but one species of genuine teak, there are many varieties, recognized by the color, quality, and texture of their grain, each distinguished by a name describing its special peculiarity. There is the chalky teak, its wood presenting a white streaked appearance, resembling concretions of lime or chalk ; it is more abundant and less valuable than many of the others. Next comes the scaly teak, so called because its stems are covered with sharp scales. Its wood is hard and firm, and nearest in value to the true teak, noted for its weight and hard, close grain, qualities that render it peculiarly adapted to shipbuilding. Its color includes several shades of brown, sometimes tinged with purple or black. Then we have the kind usually carved into the intricate designs used in the elaboration of handsome articles of furniture. The

Chinese understand the art of dyeing this wood a beautiful shining black, like ebony. This is done after the hard grain is converted into the fanciful patterns just spoken of, which frequently decorate the black chairs, tables, and screens seen in the windows of our modern shops, bearing every appearance of real ebony.

The teak-tree, like all close-grained woods, is many years in reaching maturity. A century is not old for teak. In fact, it is said to require that length of time to reach perfection. It is an established rule not to disturb the teak-tree till after it has flourished at least for a period of forty years. The tree is erect and slender, and soon attains its height, but is a long time in acquiring the desired circumference of trunk. The Dutch government plant and cultivate extensive forests or plantations of teak, which, while it receives the greatest care and is furnished with the richest soil, is said not to attain the hardness and perfection of the wood that grows on poorer ground, and which is left to the care of nature.

There are in the forests of Java a number of hard woods beside teak that will take a fine polish, many of which are sought for their close grain and beautiful colors. The wood of the lovely ketangi-tree is finer than that of teak, and is sometimes used in preference to the latter; when in bloom the ketangi is considered by many the most exquisitely beautiful tree in existence.

The soeren is another wood which is very much like the true teak. It is hard and close in texture, yellow in color, takes an equally fine polish, and its bark furnishes a yellow dye. Some of these woods resemble mahogany, some are a deep brown color, some a beautiful red, others pure white, and some are white shot with fine black hair stripes. Some are so hard that they are cut with great difficulty, others so tough that they can scarcely be split, and some as soft and malleable as wax. They are all used for special purposes.

The wood that is in greatest demand in Java is the bamboo. Deprived of it, the native would lose his greatest convenience. It is light, strong, durable, and abundant, and applied to every imaginable purpose. Rice and bamboo supply the necessities of the simple Javanese. The latter costs him nothing, and the former only a little labor. With bamboo he constructs his chairs, benches, tables, beds, houses, bridges, and fences: nearly everything he uses or takes hold of is made of bamboo, and its young shoots furnish him with an article of diet. With a little plot of ground and a bamboo thicket, the poor native feels himself well provided for. Another useful tree in Java is the soap-tree, which yields a fruit with which the natives wash their clothes. Then there is the wax-tree, that supplies them with an oil which, when exposed to the air, hardens into the

resemblance of wax, and is made into candles that, when burning, exhale a most agreeable perfume; the cotton-tree, which produces a soft, silky, short-fibred substance that takes the place of feathers in pillows, and gives equal satisfaction; the tallow-tree, and the bread-fruit tree, which also supply certain necessities of the native without so much as a thought bestowed by him.

After the Javanese has put together the frame of his dwelling and hung up his walls of light plaited bamboo, he puts on a roof of thatch, called "attap," which is generally made of the long folioles of the sago or nipa palm. These slender, sword-like leaves are doubled upon each other over long sticks, which are laid on the supports and overlap like shingles on a roof. Sometimes the bamboo leaves serve the same purpose. Added to these trees, which so readily supply the wants of the people, are others, such as the kasamok, the bark of which gives a light, impervious varnish used on their paper umbrellas, and the sampong, that yields a resin containing a strong and shiny varnish, especially desirable for such articles as the sheaths of krises. We have already named the trees bearing the principal fruits and spices, nor must we omit mention of the spreading waringin, one of which must be kept growing in front of every Javanese noble's house, to indicate nobility, and which if permitted will let down its roots and become the far-reaching banyan, mul-

tiplying upon itself until an extended grove is formed.

But among the many remarkable trees of Java none has gathered to itself the interesting romance that attaches to the pohon upas, or celebrated poison-tree, fabled to spread death over a circumference extending for miles around it. It has been commonly reported that neither animal nor vegetable life could exist in the vicinity of the upas, all of which is now regarded as a romantic fiction. It is well known, however, that there is a tree in Java, containing a sap of a milky appearance, which, when taken into the stomach or injected into the blood, acts as an immediate and deadly poison; but it grows in the forests, and has no deleterious effects whatever on the surrounding shrubbery, not even on the leaves and vines which in some instances cling to its trunk and branches. An ancient tradition exists among the natives in regard to the supposed poisonous vicinity encircling the upas-tree, which is recorded as follows:—

“Some two hundred years ago, the country surrounding the upas-tree was inhabited by a people so wicked that the prophet Mohammed applied to God to punish them, and God caused the upas-tree to grow out of the earth, which destroyed them, and rendered the country ever after uninhabitable. But one must observe,” continues the recorder, “that all Malaysians consider the

tree as a holy instrument of the great God to punish the sins of mankind, and therefore to die from the poison of the upas is generally considered an honorable death."

The valley of poison, called the Guwa Upas, in the centre of which the poison tree was formerly supposed to grow, is now known to be nothing more nor less than the porous bottom of an extinct crater, which still emits large quantities of carbonic gas, destructive to both animal and vegetable life, and there is actually no tree or herbage of any kind growing on its bleak and sandy surface. It is an oblong plain, in the Dieng Mountains, perhaps twenty miles in length and eight to ten in width, surrounded by a chain of green hills. The poisonous gas or vapor constantly forced up through the porous sand, and retained in the stagnant atmosphere above by the combined influence of the encircling hills and absence of winds, is fatal to everything that depends upon pure and healthy air for existence. Animals naturally come down the hills and try to cross this plain, where they quickly suffocate and die. Birds also attempt to fly over it from the neighboring mountains, but soon drop upon its sandy waste, which is covered with scattered spots of bleaching bones and other reminiscences of its deadly character.¹

¹ A fuller description of the Guwa Upas is given by the author in *A Princess of Java*, pp. 152, 153.

CHAPTER XI.

USEFUL ANIMALS.

THE Javanese buffalo is, next to the native pony, the most useful animal on the island. It is generally employed for agricultural purposes throughout Java, and its flesh, in the majority of instances, takes the place of beef. The ox is used occasionally for ploughing, but the buffalo is preferred for its strength, docility of disposition, and long endurance, although it is incapable of supporting the heats of midday, for which reason both it and its master take that period for resting in the shade. The buffalo is a dingy light mouse color. Sometimes a black or brown buffalo is seen, but the mouse-colored is the largest and considered the best animal. It is not as large as the American buffalo; in truth, bears little resemblance, either in character or appearance, to the fierce bovine quadruped known by the same name on our Western plains. The head is smaller, the horns are longer and spread far apart, and they carry a considerable elevation of flesh between the shoulders. In Java, this latter ornament is not confined to the buffalo, but appears in the form of a disfiguring hump on the shoulders

of the Javan ox and milch cow, neither of which is a very handsome animal. The cow, like the ox and buffalo, is small, and is used in some parts of Java for ploughing. It is milked once a day, yielding about one quart of milk.

Camels and elephants, used so extensively in British India, are unknown in Java; neither is there such an animal as a donkey or mule. The Java horses, a small breed of ponies, hardy, swift, and compact in build, meet the demands of the country, traveling in the mountain districts as pack-horses, in long strings, one behind the other, loaded with coffees and spices for the coast. In the more level localities, buffaloes are used in two-wheeled carts for the same purpose.

The finest horses are brought from Macassar and the islands of Sumatra and Sandalwood (Soemba). Each variety is a favorite, and, except in size, might be taken for the blooded Arab. The horses from Sandalwood are from thirteen to fifteen hands high, and are the largest and the most beautiful of any on the Sunda Islands. They have fine heads, large, lively eyes, thin nostrils, muscular necks well covered with short, heavy manes, straight backs, neat, slender limbs, and long, flowing tails. They are regarded as trusty, sure-footed, and able to endure exposure; and are light, strong, swift, and vigorous, displaying much boldness and ambition in getting rapidly over the ground. In character they

are tractable, affectionate, and intelligent. Their color is usually bay or dark roan, and sometimes what is termed piebald.

The Macassar horses are smaller than the Sandalwood animals, but equally well shaped, have large, soft eyes and less fiery temper, and are preferred by many for this latter quality.

In what is called the Preanger district, in the interior of Java, horses of a fine breed, larger than either the Macassar or Sandalwood, are owned by the native regents. What is known as the Java horse has greatly degenerated. In 1887-88, the Dutch government made an effort to improve the race by importing, at state expense, the Macassar and Sandalwood horse into the Preanger district.

In view of the enormous population of 22,000,000 of human beings in Java, the number of horses, alleged to be 600,000 on the whole island, is extremely small. To the European, enervated by the languor of the climate, and unable to endure exposure to the rain or sun, horses and carriages are an absolute necessity; but to the native they are an unnecessary burden, unless he be a rich noble, willing and able to swell his grandeur by their possession. The easy conditions of life for the common Javanese, where the abundant bamboo supplies him with a house for twenty-five florins, and, if he can do no better, a tiker mat laid upon the soft, warm earth offers

him a comfortable bed, and the prolific paddi-fields afford him excellent food, render a horse a needless and expensive luxury. He trots his twenty-five miles a day on unshod feet, indifferent to fatigue, and, if he owns a docile buffalo to drag his cart and plough his paddock, he possesses all the aid required.

There is no scarcity on the island of such domestic animals as swine, goats, and cows. There are also a few sheep. They are all much below the ordinary size, and the wool of the sheep is coarse, and considered hardly worth the shearing.

CHAPTER XII.

WILD ANIMALS AND GAME.

IN the vast forests, extended plains, high mountains, immense jungles, swamps, and numerous streams of Java, the sportsman will find a great diversity and abundance of game, the largest and most dangerous of which are wild bulls, stags, roebucks, wild boars, tigers, panthers, rhinoceroses, and crocodiles. Large birds are represented by the peacock, pelican, and flying-fox. The smaller game includes the wild dog, tiger-cat, a diminutive deer called "kantjil," the otter, hare, flying-squirrel, porcupine, woodcock, jungle-fowl, teal, quail, and a multifold variety of pigeons, partridges, rails, water-birds, grebes, snipe, wild ducks, grallæ, parrots, paroquets, larks, thrush, and myriads of smaller species quite impossible to name.

There are two species of wild boar, inhabiting the plains, forests, and jungles that are not above an altitude of 7000 feet. They sally forth at night in droves to attack the plantations, where they make desperate havoc in the rich feeding-grounds. The royal tiger, the most formidable antagonist of the hunter and his dogs, renders

important service in preventing the increase of the wild boar, stag, and roebuck, which do much damage to agriculture, and whose nocturnal visits are greatly dreaded by the careful planter.

The tiger delights in bamboo thickets. Here, or in the mountain jungles and isolated recesses of the vast plains, he conceals himself during the day, coming out under cover of the darkness to procure something to eat. It is said that he prefers human flesh, and when he has once tasted its dainty flavor he is ever after ferociously anxious to repeat the experience. He is solitary and unsocial in his habits, always going alone, and is not partial to the smooth and unobstructed forest floor, which deprives him of the stealthy seclusion where he loves to crouch, and spring unawares upon his luckless victim. To extirpate this dangerous beast the government pays the native two hundred florins for every tiger he destroys, or for every pair of tiger's ears he can secure. A smaller sum is paid for a panther.

The modern Javanese are all Mohammedans, but still nourish many of the ancient Hindu superstitions, and believe, according to the law of metempsychosis, that the tigers, panthers, and crocodiles that attack them are the reincarnated spirits of their enemies. Sometimes, instead of trying to destroy a crocodile, they will attempt to conciliate the malignant spirit, by placing rice on the edge of the streams which the reptile frequents, to

make it easy and convenient for him to satisfy his appetite. The native that destroys a crocodile six feet in length receives from the government twenty-five florins, and less for a shorter one. Ten florins is also paid for a crocodile egg.

Like the tiger, the stag and the roebuck generally go alone. They frequent the wastes and plains covered with tall grass and rich herbage. The wild bull dwells on the elevated mountain sides, and frequently descends to the borders of the sea in search of salt. He is wary and ferocious, avoiding the approach of man. He is endowed with wonderfully keen olfactory nerves, and scents the approach of an enemy at an incredibly long distance. He is more alert and nimble-footed than the rhinoceros, and when wounded much more to be dreaded. The female is smaller and more active than the male, beside being aggressive and wicked. She is red in color, and not as large as the ordinary milch cow, while the male is generally brown or black. The wild bulls march in companies of from six to twenty, an old and experienced leader going before the herd, to warn away the wild dogs, panthers, and tigers that may threaten attack.

The rhinoceros roams through the forests and jungles on the highest mountains, often descending to the salt swamps and flats skirting the sea for salt water. He is generally unaccompanied, is unsocial and fierce, but flies from man; when

wounded or a female with a calf, the rhinoceros is dangerous and hard to kill. Sometimes seven or eight assemble and visit a coffee or cinchona plantation, where they commit serious depredations by eating the tender shoots and uprooting the young trees. The carcass of the rhinoceros is prized by the natives, especially by the Javan Chinese, who use even the skin in preparations of food. The hide resembles that of the hippopotamus. The rhinoceros of Java has but one horn, and this is highly valued by the natives, who believe it will extract the poison, if applied to the bite of a serpent or scorpion. They claim that it will adhere to the wound till it absorbs all the venom, and that one piece can be used several times. It is also very desirable for the handles of knives and krises. One fine horn sells for from forty to one hundred and fifty florins.

The panther is more addicted to the forest than the tiger, and, instead of concealing himself in a jungle thicket, prefers to lie hidden by the green leaves on the branches of the trees, whence he can suddenly drop down on his prey. The leopard is also an inhabitant of Java. It resembles the panther in its habits and haunts, and is easily distinguished from the latter by its velvety black spots on a light yellow ground.

The crocodile lives in the water, and infests the banks of rivers, the borders of swamps and low watery regions, and the sea-coasts near the mouths

of rivers. These creatures are from twenty to thirty feet in length, and are always ravenous and dangerous. The Chinese in Java consider the fat of the crocodile a most efficient remedy, if applied externally, in cases of rheumatism. Its hide is very hard, and not infrequently it remains a long time on the spot where it has been struck by the ball of the hunter. When wounded in a vital part, such as the head, heart, or spine, it plunges into the water instantly, and dies in about two hours. It reigns supreme over the smaller denizens of the deep.

The wild dog inhabits the forests, jungles, and localities covered with tall grass and low bushes, roaming from the edges of the sea to the summits of the highest mountains. Wild dogs are generally seen in large troops, and will attack horses, deer, or sheep, but fly from the more savage and ferocious animals. Their fine sense of smell renders it almost impossible for the hunter to gain a near approach. Gangs of wolves are numerous, and scour the mountains and plains in pursuit of the wild boar.

The tiger-cat dwells in the same localities as the panther, hiding in the branches of the trees, and seldom falls when shot by the sportsman. It lives on small birds and small animals. The haunts of the civet are similar to those of the tiger-cat, but it is not carnivorous, like the latter, and feeds on fruits, such as bananas, pineapples,

etc. It is sought by the natives for a musk which it furnishes, and which they mix with their cigarette tobacco. The odor of this perfume is very strong and agreeable. The wild-cat is found in the forests and jungles, like its cousin the tiger-cat, though more frequently seen on the plains covered with high grass and low shrubbery. It is not confined, however, to any particular locality either in plain, mountain, or forest. It is similar to the jackal in color and conformation, and is shy and cautious, rarely ever allowing itself to be caught or shot by the sportsman. After destroying nearly all the small game in one locality, the wild-cat suddenly disappears, to turn up unexpectedly in a new quarter, and begin again the work of destruction.

The otter inhabit swamps and the streams that descend from the mountains. They are gifted with discerning instincts, concealing themselves during the day in holes and thickets in great numbers, and are seldom to be caught. The little animals the natives call "kantjil," resembling tiny roebucks about fourteen or eighteen inches high, with brilliant eyes, live in grassy and bushy districts, and bound swiftly over the ground in a zigzag course. They are sought for, like the civet, for the musk they produce, which is the same as that furnished by their kind on the high mountains of Thibet. The porcupine is found on the level grounds, hiding about the hedges

that inclose the plantations, and comes out to feed during the night. The hare, very small and harmless, is attracted to the same places, but runs about the gardens at all hours.

The ichneumon is a little animal that darts about over ground well covered with herbage, and lives by sucking the blood of rats, mice, chickens, and ducks, also eating eggs and insects. It is the avowed enemy of snakes of all sizes and species. At the sight of a serpent its eyes will blaze like coals of fire, and it attacks the reptile with the most vehement ardor and seemingly concentrated spite, dexterously renewing the combat until it conquers, which it does generally. When bitten, it desists a moment to run into a neighboring thicket for what is supposed to be an antidote, and returns to continue the attack with increased vigor.

The flying-squirrel and the flying-cat dwell in the forest, hiding among the leaves during the day, to fly or jump from tree to tree at night. The former is sought for its fur, and the latter is studiously avoided by the superstitious native, who accredits it with possessing strange and fatal powers of fascination.

There is another busy animal that makes itself very conspicuous in Java, which cannot be termed game, neither can it be termed useful, domestic, nor wild. That is the monkey. Three colonies of these half-human creatures live on the island,

two of which occupy the ends and one the centre. They never associate or intermarry, each keeping to its own tribe and its own dominions, and retaining its own distinctive features. One colony comprises the little blue species; another, the large yellow monkey, with white face and curled tail; the third presents the big black monkey, with prehensile tail, by which he swings himself in sportive moments from the limbs of the trees. Their numbers cannot be computed: in some of the forests they seem fairly to cover the branches of the trees, chattering incessantly. They are very mischievous, and there have been several instances where hunters, coming across a pool of water, and undressing to bathe, came out of the pool to see the monkeys scampering off with their clothes. When brought into a house or a village, the thieving propensity of the monkey increases, and unless it is secured to one spot the small articles in the rooms are carried off. The habits of these creatures are amusing, particularly in the management of their young. The mother will take the baby to the stream, walk into the shallow edge, bathe it, and correct it for disobedience; compelling it to stand up or be dipped under, rubbed or rinsed, according to her will. The natives consider it a sure omen of impending calamity to shoot a monkey.

CHAPTER XIII.

FEATHERED GAME.

THE peacock and the pelican are the largest birds in Java. The former inhabits the groves and forests, and passes the night sitting in the branches of the highest trees. Peacocks are generally found in flocks, and leave their lodgings at the first peep of dawn to go in search of grain, herbs, paddy, and insects for food. The early mornings and evenings they devote to procuring a livelihood, preferring to avoid observation by remaining in the depths of the forest during the day, — a custom peculiar to the birds and animals of the tropics. Sometimes these gorgeous birds are seen under a brilliant moon, when the splendor of their colors confers upon them a mysterious and imposing grandeur. Of all birds, excepting the bird of paradise, the peacock is certainly the most magnificent. Where there is so much beauty one might expect to find some melody of voice, but the harsh cry of the peacock, always heard in the morning before sunrise, dissipates all such fancies in connection with its rich coloring. It is extremely shy, and gets away as fast as possible from everything new or strange, but flies heavily

unless there is a strong wind to assist its attempts. The mountain forests and wooded districts along the sea-coasts are its favorite places of abode.

The pelican is found in the low, swampy flats and along the borders of the seas, where it spends its time in standing on one leg, in deep meditation, or in fishing with its long bill in the shallow water. It is a gloomy, unsocial bird, neither pleasant to look at nor good for food.

The flying-fox, a species of bat, is the next largest flying animal, and by far the most interesting. When dawn appears these strange creatures seek the darkest recesses of the forest, where they hang from the trees by their feet in silent and motionless black masses till darkness approaches, when they awake, and come forth to sail around above the trees in the moonlight, and to feed on the tender sprouts and fruit of the palm groves.

Among the large feathered game, the heron, the stork, the falcon, and the marabout take an important place. The first two frequent the mountain forests bordering on the sea, but not above an elevation of three or four thousand feet. They fly much higher, however, making a noise with their wings like the puffs of slowly escaping steam.

The wild cock, though not magnificent like the peacock, is a very handsome bird. It has a beautiful red comb, red and brown plumage, with blue-

black wings. It inhabits the jungles and thickets, and its capture is exceedingly difficult. Pigeons of many species and brilliant colors, especially the numerous green varieties, abound in the forests and jungles, and vie in prodigious numbers with green and red paroquets ; both ambling all day long like swarms of insects over the forest trees and jungle vines, making the woods ring with their incessant coo-o-o-o. Myriads of partridges congregate on the vast plains on the high mountains, where they allow themselves easily to be captured. They are migratory, coming in millions, and staying only a short time on the dry lands covered with grass and rich vegetation ; but where larger and more exciting game is so abundant, the sportsman considers time wasted that is given to the insignificant partridge. Quail is very plentiful, also, but very little cared for. Birds in Java are generally sought for their beautiful plumage, and the poor, dull little quail, having no brilliancy to boast of, passes unnoticed, unless, as sometimes happens, an indolent hunter follows it merely for the excitement of the chase.

The peacock, wild fowl, and partridge are kindly regarded for their important services in devouring the bugs and insects that destroy the tender twigs and foliage of the coffee, indigo, and cinchona plantations. The mountain ducks congregate about the small lakes and sheets of water that frequently rise in the bottom of extinct cra-

ters, and in the fissures opened by former eruptions. They are shy and wild, and not often seen below an elevation of 4000 feet from sea level. The woodcock and wild goose frequent the paddy fields and swampy flats during the wet monsoon, where the ambitious sportsman may secure incredible numbers in one day. Plover appear in multitudes a short time before the arrival of the woodcock, and remain till after the latter has departed. Some localities are literally alive with plover during the rainy season. The turtle-dove attracts more interest, perhaps, than any other species of small bird. It dwells in the groves, gardens, and plantations, where its plaintive call is heard in the evening, and generally for a few moments once every hour during the night, awakening a sentiment of sadness in the bosom of the listener. The natives are extremely fond of ring-doves, which they confine in cages about their villages. The ring-doves of Java are pinkish-gray in color, with necks encircled with shining black rings. The Javanese attach much importance to their song, if their trill is even and sonorous, believing it to be a forerunner of happiness. They also believe the presence of the ring-dove in their dwellings to be a charm against loss by fire. Many other kinds of dove, shading in color from yellow to white and black, are found in the forests and jungles, and form an acceptable and common article of diet on the tables of the Europeans.

In addition to the comparatively few birds we have named are the almost interminable species of very small birds, which collect in cloud-like groups, and sail through the air, towards evening, in long, dark, wavy bands, stretching a mile or more in length.

The small birds called the esculent swallows, which furnish the edible birds' nests so much prized by the Chinese for their supposed property of renewing vigor and vitality of blood, inhabit the deep caverns and fissures in cliffs on the coasts, particularly on the south side of the island, where the high, overhanging rocks render their abodes secret and inaccessible, except by descending ropes let down over the boiling surf from the projecting precipices above. Occasionally, these birds and their nests are found in the remote recesses of gloomy caves a little distance from the sea; but generally the swallows prefer those retreats where they can attach their nests to cliffs whose base is washed by the foaming breakers. Several opinions have been advanced in regard to the tenacious substance of which the edible birds' nests are composed. The theory now established is, that it consists of a glutinous vegetable matter, gathered from the rocks and swallowed by the birds, to be disgorged and employed in building the nests. Those of best quality are white, and about the size of tea-cups. The nests are made into a soup, and are eaten only by the rich

Chinese, who do not hesitate to give thirty-five or forty dollars for a kati of them, equal to about one and one third English pounds. The excellence of the nests depends upon their situation. Those that are found in the dampest and deepest recesses are esteemed as possessing more of the glutinous and transparent quality that makes the nest valuable than those that cling to the rocks near the entrance of the caves, where there is a drier and freer circulation of air.

The proprietor of a bird's-nest rock is very careful in his management of the birds. If the nests are gathered too often or in too great numbers, the birds will emigrate to a more inaccessible retreat. It is customary to fumigate the caverns at intervals, and to destroy all the old and worthless nests; after which the birds are sometimes allowed to remain undisturbed for two or three years, during which time they multiply, and the nests greatly increase, to the future advantage of the proprietor. As the best nests are the most difficult to obtain, the nest-gatherer's task is beset with imminent danger. A false move, a weak section in the rope, or an insecure fastening above, and he is dashed to pieces on the rocks hidden in the surf boiling and foaming below. After the nests are collected, and the season for gathering has passed, it is quite common to celebrate the event by giving a buffalo feast.

CHAPTER XIV.

REPTILES.

NEXT in size to the crocodile, of which we have already spoken, is a species of lizard, usually called the iguana by the Europeans. It has a wide mouth, crested head, four short feet with hooked claws, a long tail, and attains a length of six or seven feet. Its haunts are similar to those of the crocodile, but, unlike the latter, while it is very ugly and rather startling to look upon, it is not especially dangerous. It lives upon herbs and vegetables, and its eggs are eaten by the natives. Its fat is highly esteemed for medicinal purposes. The gheko is another lizard regarded with much disfavor by Europeans. It generally lives about ruins and dwellings, concealing itself under the eaves of the roof, or behind the pictures or furniture against the walls; in fact, in almost any dark and unfrequented spot. The gheko takes its name from its sharp, hoarse cry, which clearly calls "gheko," and may startle one at any moment. It avoids the light, and comes out of its hiding-place at night to seek water. It is harmless unless attacked; then its bite is said to be as poisonous as that of a snake. The natives are

superstitious about killing the gheko, holding that such an event is an omen of misfortune. There are numerous species of lizards in Java, comprising all sorts, sizes, and colors, but the chameleon and the little scincoidian, which scampers across the ceiling, with back downward, like a fly, come most frequently under notice. Both are harmless, and anxious to get out of sight as soon as possible.

The land and water turtles are abundant and considered excellent food, and both supply the tortoise-shell, used for combs and fancy articles, which is the basis of a petty traffic in the towns about the coasts. Gigantic centipedes, scorpions, toads, and frog-fish may be estimated by the millions in any locality, beside the billions and trillions of insects, all colors and shapes, which make the groves and forests jubilant with their unceasing song. The most formidable and most to be dreaded of animals or reptiles are the stealthy and venomous serpents which glide noiselessly about in the most frequented places; silent, subtle, bold, and aggressive, yet seeming to seek concealment, they are objects of terror within and without. They are met in the gardens, where they coil their brilliant colors about the shrubbery or make bright circles on the dark ground; also on the verandas and in the bedchambers, even in the beds, where one may find them at any time. In short, there is not a nook, corner,

or cranny in all Java where a snake of almost any length or thickness may not suddenly reveal itself. The trees abound with serpents. So numerous are they and so poisonous that the most indifferent native seldom climbs any but the cocoanut-tree, whose tall trunk, destitute of leaf or limb, affords little opportunity for rest or concealment. To wade through the grass or travel at night without a flambeau to illuminate his footsteps, is considered by the native rash and dangerous. This perpetual caution becomes second nature to the inhabitant of Java.

The varieties of snakes are almost countless; many are much dreaded, and their bite is said to produce almost immediate death. They are beautifully variegated in colors more or less brilliant, including shining white and brightest black, distributed sometimes in stripes, rings, dots, or diamonds, or they display one solid color of red, yellow, or green. Some are short and very thick; many both long and thick, measuring easily from twelve to twenty feet. Others are long and slender like a whiplash, and hang about the branches of the trees like a supple cord or rope. Some coil in a heap in the path, and instantly prepare for attack by blowing from the mouth, before they spring, a green vapor, for a distance of fifteen feet or more, on any object that excites their alarm.

The boa-constrictor and the python are quite common, and generally considered the largest

species, though the oelar sawah, that infests the rice plantations, is sometimes found to be much larger, and is said to be able to charm its intended victim into tranquillity. The natives relate horrifying tales of another species, how they suspend their bodies by the tail from the limbs of trees above paths in the forest which are traversed by animals going for water; and thus swinging, watch and wait to seize upon any small animal that passes beneath. The cobra, so dreaded in other parts of India, is unknown in Java, though it has a representative equally vicious and poisonous in the hamadryad.

It is hardly necessary to state that in a country abounding with rivers of tepid, muddy water, fish must be wonderfully abundant. There are some thirty-five or forty distinct varieties of river fish, all excellent for food, and quite as many kinds of sea fish. The latter are taken with nets, and with hook and line. The fishing-boats go out to sea with the land breeze before daylight, and return with the sea breeze after midday. Several methods are practiced for taking river fish. One is to build a bamboo fence across the streams; another, to throw intoxicating drugs into the water, after which the fish soon float upon the surface and are easily secured.

Several species of shark infest the seas in the archipelago, but the white, or man-eating, shark abounds about the islands. It is always vora-

cious, of great size, and very daring. To bathe in the surf on the coasts of Java is a luxury almost unknown.

It is very much easier to name what Java does not possess than to enumerate all that the beautiful island can present. Where all climates prevail, it is safe to allow that anything partaking of earth, air, and sky can be produced. The most impartial must admit that Java is Nature's especial pet, upon which she has lavished her cherished favors. Her beauty and extraordinary fecundity rightly entitle her to the eminence that no other country of her size enjoys, but where Nature is in a continual delirium, ever producing, developing, and devouring to produce again, what may we not expect? Here we see a frenzy of supply and waste; a ceaseless renewal of animal and vegetable life. The first fiery, passionate, and impulsive, concealed under a languid and indifferent exterior; the second glowing, breathing, and palpitating under the forcing heats of an equatorial sun.

Java, with her extravagant verdure, her mountain chains, her assemblage of symmetrical volcanoes, her numerous rivers, her boiling wells and fountains of fire, her matted jungles and bamboo thickets, her extended plains and vast forests, her lovely groves of perpetual shade, her gigantic trees overflowing with fluids and perfumes, her waving palms and lofty cocoas crowned with

bending heads of fruit, her glorious flora, her coffees, spices, odors, and essences, her monstrous tigers, bats, and serpents, her sedate, brown-skinned people, with their soft language and gentle ways, stands before the world without a compeer. Nowhere have we such a variety of contrasts. Here the floods of heaven suddenly deluge the earth, to be immediately absorbed by the fervid sunshine; electric flames rend the clouds, and terrific thunders shake the air under the bluest skies and most brilliant sun. The mountains spit forth showers of stone and fiery lava on smiling fields and flowering plains; and the thickets, gorgeous with bloom and jubilant with song, conceal the savage wild beast and deadly serpent. The forests, tingling with low music from millions of tiny insect throats, echo the thunderous roar of the hungry tiger, and birds in brilliant plumage warble unceasingly in the beautiful trees, above spiteful snakes, squirming and hissing in the grass below. The air quivers and trembles with heat, while the sweetest and softest zephyrs rustle among the drooping leaves and shining foliage. Scorching days are followed by refreshing nights moist with copious dew, and months of drought are succeeded by excessive and restoring rains. In Java, Nature delights in displaying her eccentricities; and, go where we may, we turn with wonder to the "Pearl of the East."

CHAPTER XV.

THE POPULATION.

THE Javanese appear to have descended from the one general race that first peopled all the islands of the East Indian Archipelago; and, though it cannot be said that they bear anything like a marked resemblance to any one of the present different tribes or peoples that inhabit the above-named islands, they possess sufficient likeness in common to show that they belong to one origin. The Malays, originally from Sumatra, with a large admixture of Chinese and Arabs, make up the native population on the coasts; the Javanese proper, being an altogether agricultural people, inhabit the interior.

In personal appearance, the Javanese is rather small in stature, well shaped, graceful, slender and erect in figure, with small hands and feet, particularly among the upper classes; and those that are not exposed to the sun and outer air have bright brown complexions, or golden-yellow, which is their standard of beauty. Their hair is unusually long, straight, and very black; eyes black or very dark, small, short nose, well-formed mouth, broad, full forehead, round, somewhat flat

face, with a mild, thoughtful expression, and an air of sedate and respectful deference. There is a very decided difference between the higher and lower classes: the former being much fairer in complexion, and more delicate and refined in feature, than the latter, especially in the case of the women, who are sometimes very pretty, and always gentle, obliging, and more or less attractive, after the fashion of the Oriental woman. The race matures early, and the sexes marry when very young; it is not uncommon to see mother and daughter parents of children of the same age. An unmarried man beyond the age of twenty is very rare, and a woman who has never been married is an absolute curiosity. They are a domestic people, regular in their habits, not given to roaming from one locality to another, fond of their children, and cherishing the female offspring with as much pride and tenderness as the male. Slavery, which was formerly an institution among them, has been wholly abolished by the Dutch. Altogether, the Javanese are a healthy, moderately good-looking, industrious, and thriving race; taking life easily, and regarding the future with the utmost indifference. Polygamy is the custom of the country, and divorce is frequent, and obtained without difficulty. The first wife and her children inherit by law; the second and her children, by courtesy. Some of the regents and princes of Java are known to have as many as sixty and seventy children.

The Javanese entertain a profound respect for rank. The inferior classes never dispute the will or wisdom of their superiors. A Javanese belonging to the common people would not dare to enter the presence of a noble of his own race without assuming a squatting position ; neither is it the custom for a woman to eat with her grown-up sons or husband, nor to sit with them unless requested.

The Chinese in Java are chiefly found on the coast, in Batavia, Samarang, and Soerabaja. The Arabs, who are nearly all priests and religious teachers, are scattered over the island. These foreigners generally marry Javanese wives ; and the mixed races, including half-castes or offspring of the European and Javanese, consequently make a large element in the population, particularly in the cities. The Chinese live in the towns in quarters allotted to them by the government, and have their own laws, administered by their own officers, — a mayor, captain, and lieutenant, — appointed from among their number for that purpose by the government.

The Chinese are much more enterprising and persevering than the Javanese ; and, although not more intelligent than the latter, are so sprightly and alert, and quick to perceive and appropriate any advantage to their own benefit, that they have the reputation of being roguish and extortionate. They engage in trade of all descriptions, and are

princes in the commerce of the country. The manipulations of the opium farms, which yield an enormous revenue, are entirely in the hands of the Chinese. The Arabs who are not engaged in the promotion of religion are merchants; both classes doing an extensive business in their own particular line.

The Malays composing the population on the coasts are generally confounded with the original inhabitants of the island, while they are in reality quite another people. They are shorter and broader in stature, with faces more round and flat, and a trifle darker in color. As we have said, they belong to Sumatra; but, emigrating to the coast towns of Java, and constituting that part of the population generally seen by the passing visitor, they are usually spoken of as being the true Javanese.

CHAPTER XVI.

HOUSES AND DRESS.

THE hut or cottage of the Javanese or Malay is very simple in construction, and costs little. Twelve rupees, equal to five dollars, will build what the native considers a most respectable and comfortable bamboo hut, and twenty-five or thirty rupees will procure him a cottage containing two or perhaps three rooms, and ornamented with a veranda. When he becomes tired of his surroundings, or prefers a more eligible location within easy distance, he calls in two or three friends, and moves his domicile to the more desirable quarter. The walls and inside partitions of his house are made of plaited strips of flattened bamboo, hung or nailed on a wooden framework, which is roofed with attap or palm thatch. The houses are generally without windows, sufficient light being admitted through the door and interstices between the plaited strips of bamboo. Where people pass all their time on their verandas or in the open air, and the one desire is to keep their dwellings dark and cool, for sleep or retirement, windows are considered superfluous. The dwelling described is occupied by the lower

classes. The natives sleep on springy bamboo benches, about a foot high and six or eight feet square, called the "bali-bali." On these primitive bedsteads they spread the universal mats and pillows, making cool and pleasant sleeping-couches.

The houses of the village chiefs and petty office-holders cost much more than the hut or cottage of the peasant, and are recognized by their increased size and the attap with eight slopes. The largest and best dwellings are those of the nobles. They are large and commodious, built of wood or stone as the owner desires, and are distinguished by the two spreading waringin-trees, indicating nobility, which are always kept growing on the green in front. The house of the noble stands alone, while the cottages of the peasants are in groups, and generally quite concealed in masses of luxuriant foliage, surrounded by fences of bamboo, within which each cottage is encircled by its own little inclosure of banana and cocoa-palm.

The Bopatis — a title given to the Javanese nobles who govern provinces, and are called Regents by the Dutch, — dwell in handsome palaces, which are beautified with appropriate grounds. The palaces of the Sultan and Soesoenan, the two native sovereigns of Java, are richly furnished, and stand in the midst of extensive inclosures, encircled by high fortified walls, and are called "kratons." The outside wall around the kraton of the

Soesoenan at Soerakarta is more than three miles in circumference, inside of which are walls within walls and squares within squares, comprising the various apartments used for state purposes, and by the families that attend the sovereign and the royal princes. Within the walls of the kraton and in front of the palace, the great square of superb green is ornamented, like those of the smaller palaces, with two immense waringin-trees.

The better classes among the Javanese use many handsome and sometimes very expensive articles of European furniture, while the lower classes use neither tables nor chairs, and eat with their fingers from wooden trays. It is the duty of the women of the household to weave the cloth for the dresses of the family, which consist of the sarong and kabaya for the women, and the sarong and bajoe for the men. The sarong is a piece of cotton or silk cloth, some eight feet long and four feet wide, either plain dark blue or in beautiful bright figures and colors, with ends sewed together and top and bottom left open. It is slipped over the body and laid about the waist in plaits, which are held in place by a long sash, allowing the balance of the garment to fall to the ankles. The kabaya is a long, sack-like garment of colored print, silk or white muslin, worn over the upper half of the body, and reaching to the knees. The bajoe is almost the same garment, worn by the men, and reaches a little below the

waist, the sarong, sash, bajoe, and kabaya varying in richness according to the rank or circumstances of the wearer. The men wear the sarong very short, and sometimes under it thin cotton trousers. In all conditions they fold a bright cotton or silk handkerchief around the head in a peculiar way. In the case of men who are rich and occupy good positions, the dress often presents a little more of the European character, in the addition of real European trousers, with a short jacket resembling a coat, and a white vest buttoned to the throat with diamond buttons.

The women never cover their heads, and wear the hair combed straight back from the forehead and done up in a round knot at the back of the head, which is adorned by sticking through it long gold or silver pins, ornamented with precious stones, if the owner of the head can afford them. The men allow their hair to grow long, and twist it into a flat coil on the top of the head, secure it with a comb, and cover it with the handkerchief. Both sexes use perfumes and dress the hair with cocoanut oil. The peasants when at work in the fields usually have nothing on but the hip cloth and chapeng, the latter a peculiarly shaped, broad, flat hat of plaited bamboo, placed on top of the handkerchief. The court costume and war dress are both elaborate and expensive affairs. On all occasions and in all conditions the Javanese wears a belt, with the kris or short dagger stuck under

it on the right side behind ; also a small knife ; on journeys he adds a cleaver-like weapon.

They are all fond of jewelry and perfumery, and display a profusion of finger rings, studs, earrings, diamond-headed pins, necklaces, and bracelets ; children wear armlets and anklets of gold or silver. The Javanese consider it “ mean and degrading not to dress according to your circumstances, or to be seen in low company. They hold it as a rule that a man should robe himself in clothes that accord with his position and condition, and scorn to lie or disgrace his family or play the hypocrite,” — maxims that the Western world might adopt with advantage.

The lower classes go barefooted. The upper classes wear a shoe sole with toe-piece ; if wealthy the toe-piece is richly embroidered or set with diamonds. The regents, when on journeys or in attendance with European officials, frequently wear shoes for the time, with trousers under their sarongs, and over their headdress a stiff velvet cap trimmed with gold lace and with a diamond on the crown. The wealthy, when they go abroad, have servants to hold a gigantic umbrella over them. Their dress is rich and in colors denoting their rank, and they preserve a sedate and dignified air, accepting without sign of recognition the homage of the poor peasant or laborer, who is taught to fall on his knees as they pass.

The practice of filing the teeth a little concave

in front and dyeing them black by chewing siri is a custom of the Javanese handed down from time immemorial. The operation is performed when the child is about eight years of age.

It is the custom for all classes to bathe at least once a day, but more generally twice. The poor resort to the nearest river, where they disport themselves in the water a short time, wearing the sarong in which they have been working or have just slept, and dexterously replacing it with another that is clean and dry, at the edge of the stream. If a river is not convenient, they bathe at the side of a well, pouring the water on the top of the head and allowing it to run down over the body. The rich have luxurious bath-rooms attached to their dwellings. All classes perfume their clothes, rub the skin with fragrant oils, and dust it with highly scented powder, which is either white or bright yellow. The aristocracy use the yellow powder, and employ yellow in the silk or satin envelopes in which they send messages to their friends.

The women are generally intrusted with the pecuniary affairs of the family, buying, selling, and making bargains according to their own judgment; the males of the family always accepting their management, it being quite understood that the latter possess neither the taste nor inclination for petty matters relating to money.

The kris, of which there are many shapes and

kinds, modeled after the one essential pattern, and the wearing of which is a national institution in Java, seems to be carried quite as much for ornament as for use. Stuck in the belt on the right of the back, it makes a conspicuous feature of the dress. If the owner is rich the handle and scabbard of the weapon sparkle with brilliants. The kris is worn generally by the inhabitants of the surrounding islands, to which fact the Javanese refer with much pride, as confirmation of the ancient records relating how Java once governed all those countries. To make the weapon more effective, the blade is often serpentine and poisoned, so that, should the victim escape death from the wound, he will succumb to the effects of the poison received in the blood. While we cannot call the Javanese a bloodthirsty people, it is certain that they show much fondness for the sight of the crimson fluid, and will stand around a bleeding animal, watching its dying throes with calm satisfaction. In a country where the passions of revenge and jealousy run high, where wrongs and extortions are frequently committed, and where justice is slow, there is a strong incentive for the individual to redress his grievance on the spot. In view of this, the convenient kris is dangerous. The higher classes, however, seldom use it as a weapon of defense, and unquestionably not unless the provocation is very great. Silent poisons appear to be their favorite mode of wreaking vengeance.

CHAPTER XVII.

FOOD AND COOKING.

THE Javanese, being Mohammedans, avoid eating swine's flesh and drinking intoxicating beverages. Some, who are direct descendants of Hindu ancestors, and still retain their veneration for the sacred bull, abstain from partaking of the flesh of either the cow or her consort. Rice comprises their principal article of diet, to which is added fish, fowl, and vegetables, of which they have an abundance. The ox, deer, goat, and buffalo are acceptable as food, and cayenne pepper forms a large ingredient in everything prepared for the table. Milk is scarce, and butter is not made by the Javanese. White grubs and a species of worm found in trees are esteemed as articles of food, but rice with curry and red pepper constitutes the "staff of life" throughout the island, usually accompanied with dried fish, dried buffalo meat, and the fruits of the country. Salted duck's eggs are largely prepared for table use, to be eaten with the rice and curry, to which are added several highly seasoned preparations called sambels. Sugar manufactured from the sugar-palm is plentiful, and much used in delicacies

made with rice. Tea and coffee are universally drunk when obtainable, and are always served with the two regular meals of the day, beside being taken early in the morning with a little rice, and in the middle of the afternoon.

Tobacco, the siri leaf, and betel-nut are used by all classes. The two last-named, mashed together with a little lime, compose the siri, which all chew, and carry about with them in siri-boxes. It exudes a blood-red juice, staining the lips and blackening the teeth, which is a mark of beauty in the estimation of the Javanese, who declare that to have "white teeth like an animal" is a great reproach.

The practice of smoking opium is indulged in to some extent by the Javanese, though not carried to the excess that it reaches among the Chinese who reside on the island. Its effects are always pernicious and degrading, but as its traffic yields an enormous revenue to the government, no objections are presented. It is not eaten in its crude state, but is boiled down and rolled into pills, which are inserted in a pipe and smoked. Opium pipes are frequently very elaborate and costly; an opium smoker is easily recognized by his shattered and haggard appearance, and is despised as a drunkard and a worthless wretch. The opium smoker is not admitted into decent Javanese society. The effect of the drug in small quantities is said to be pleasant and exhilarating,

but if used with immoderation it excites violent passions, or brings on paroxysms of madness. At best it is considered a slow and certain poison, which gradually destroys the body and the mind, and reduces its victim to the level of the brute. An opium smoker is soon lost to every humane and respectable influence, becomes callous to all claims of duty or affection, and gives himself entirely over to the indulgence of his dreadful appetite, speedily sinking into the grave, the most abandoned of abandoned creatures.

CHAPTER XVIII.

AGRICULTURE.

THE soil and its possibilities constitute the great wealth of Java. To agriculture and the product of the crop the peasant, the merchant, the official, and the government look for their revenue. When a tax is to be levied, or a new assessment imposed, or assistance to the treasury is desired, the lands are surveyed, the fields planted, and the harvests estimated in advance. The wealth of a district or a village is computed according to the quality of its soil and the extent of its plantations.

The soil exacts little care from the cultivator, and returns an enormous interest for every attention bestowed upon it. Two and even three crops in a year from the same ground are quite common, and still leave unexhausted the marvelous fertility of the soil. As we have already said, everything will grow in Java; but rice, sugar-cane, cinchona, coffee, tea, indigo, and cocoa-nut are the great staples of the country, while other tropical products are abundant.

The rice districts on the low grounds, capable of inundation, are termed "sawahs;" the higher

culture on the dry grounds, "tegal." It is on the sawahs, which are alleged to produce the best article, that the important rice cultivation is pursued. The price of rice is of great importance to the laborer, who receives it or its equivalent in money for his work. One kati, or pound and a third, of rice is considered sufficient for the subsistence of one person for a day. Rice in the hull or in the field is called "paddy." All other grains are cultivated on the high grounds. There are said to be nearly a hundred different kinds of rice on the island.

A rude wooden plough, a large hoe, and a small reaping-knife are the chief implements of husbandry. The plough is made of wood, and is so light that when the work is done the peasant unhooks his buffalo, throws the plough over his shoulder, and carries it home. If a harrow is used, he sits upon it to assist in leveling the spongy loam.

The village priest looks after the seasons, and apprises the inhabitants of the approaching time to sow, transplant, irrigate, and reap, giving equal attention to the periods for dry and wet cultivation. Added to the crops of rice are several species of vegetables, such as beans, cucumbers, maize, etc., the seeds of which are dropped with the rice, and reach maturity after the paddy is harvested, giving a succession of crops from the same ground. Cotton is frequently cultivated in this manner.

Maize roasted in the ear, before all the husk is removed, is a favorite article of subsistence. It is never reduced to a meal and converted into bread. It may be planted at any time of the year, and thrives luxuriantly. There are several kinds: one, especially, bearing a large, full grain, which requires seven months to ripen; another, having a smaller grain, requires three months; and one of very inferior quality matures in forty-five days. The yam, plantain, sweet and white potato, various species of beans, and the seed called "jawa-woet" are cultivated and used when there is a scarcity of rice.

A toddy is made from the liquid procured by tapping the aren, or sugar-palm, of which the natives are very fond, although intoxication among them is almost unknown. The pith taken from this tree resembles sago, and mixed with the crude palm sugar makes a popular confection. The soft pulp of the unripe cocoa, used in the same way, is another agreeable *pâté*.

Oil for lamps is obtained from several plants by grinding and expressing the pulp, but oil from the cocoanut is the most desirable and plentiful. It is used for cooking, and when fresh does not impart a disagreeable flavor. The natives make it for their own use by grating the white meat that lines the inside of the ripe cocoanut, then mixing it with water and boiling it, when the oil comes to the top and is skimmed off.

Sugar-cane, of which there are numerous varieties, is extensively cultivated on the lowlands all over Java, and is not prized by the natives for its saccharine juice, but is eaten as a sweetmeat. The process of manufacturing sugar is left to the industry and ingenuity of foreigners. Sugar furnishes one of the important and profitable articles of export. Before the construction, within the last few years, of railroads on the island, the heavy sugars, rice, and other products that were not conveyed to the coasts by water were carried on the backs of oxen, buffaloes, horses, men, and women. In this manner all the products of the interior reached the seaports. Within a distance of fifty or sixty miles from Batavia a clumsy cart, drawn by buffaloes, was, and is still, sometimes used for this purpose. Thirty-one million piculs of sugar were exported from Java during the five years ending 1889. One picul equals one hundred and thirty-six English pounds.

The roads all over Java are exceptionally good, having been constructed, with much labor and expense, by the government, and by the latter are kept in perfect order. Postal and telegraphic communication is also thorough and complete. There is one principal highway or post road, extending from Anger, on the Straits of Sunda, to Soerabaja, on the Strait of Bali, covering a distance of seven hundred and fifty miles. Post stations, with relays of horses, are established at

intervals of five miles along this superb public route, which is crossed from north to south by the high military state road connecting the two native capitals, Soerakarta and Djokjokarta. Other fine roads have been constructed wherever they were demanded by commerce or deemed advantageous.

Public markets are held twice weekly all over the island. Traffic of nearly every description is carried on at these public sales. Little is needed, from thread and thimbles to silks and satins, that cannot be there procured. The Chinese peddler, with petty trifles, and the great Arab merchant are both in the bazars, plying their respective trades. Another quarter is devoted to the buying, selling, and exchanging of cattle; another to vegetables, fruit, and cooked native foods. In short, every species of Eastern trade is more or less practiced. These markets, with the petty coasting trade, supply everything that the country produces.

CHAPTER XIX.

COFFEE, TOBACCO, PEPPER, COTTON, INDIGO.

THE culture of coffee was introduced by the Dutch, and the berry has since become one of the great staple exports of the country. Coffee is regarded as one of the government monopolies. Its production and delivery into the government stores are effected, if need be, by the forced labor of the natives.

The coffee lands in Java, with the exception of eighteen plantations on eighteen estates owned by private individuals, in freehold, who received their rights during or before the English occupation, are the property of the government, and are either cultivated by the latter, or sold to planters on leases not exceeding a period of seventy-five years. The natives dwelling on the government lands are compelled to pay to the government a tax of one day of labor out of every seven. At the end of the season, when the coffee is delivered, the chiefs each receive a certain sum per picul for the quantity produced in their district, and the fixed price paid by the government is divided among the workmen. According to government statistics, the cost price of prepared government

coffee delivered at the government warehouses is from fourteen to sixteen rupees per picul; delivered to the seaport, sixteen to sixteen and one half rupees per picul. The net receipts of the government are about thirty-one and a quarter rupees per picul. One rupee is equal to forty cents in gold.

Three hundred and fourteen coffee plantations, comprising 126,582 bahoes of land (one bahoe equal to about one and a half acres), are owned by planters on leases, at prices ranging from 5,000 to 2,285,350 rupees, according to the size, salubrity, situation, and improvement of the different plantations. In the domains of the vassal princes of Djokjokarta and Soerakarta, ninety-six coffee plantations, covering 164,422 bahoes of ground, are leased at a yearly rental of from 102 to 21,733 rupees, according to their value, the coffee to be delivered to the government at an extremely low figure. Added to the products of the lands named is the coffee from the monosoeko¹ plantations, which also goes to the government, the natives preferring generally to deliver it in the red husk, at from five to seven rupees the picul. The eighteen plantations in freehold comprise 572,754 bahoes of land. These estates are immense in size, and very valuable. The cultivators of these private plantations and of those held on leases requiring the ground to be cultivated and

¹ Peasant farming of small portions of land.

improved can dispose of their products at their own option.

Following the estimates, we learn that 1,081,919 piculs of prepared coffee were gathered from 239,129,453 trees on the government plantations in 1883, and 394,113 piculs were produced on the private estates. In 1889 the government yield fell off nearly one half, and the private estates reached 472,194 piculs. The annual export of coffee from Java, during the last twenty years, has varied from 1,000,000 to 1,460,000 piculs. About 100,000 piculs are used yearly in Java. The average number of trees required to produce one picul of prepared coffee is 241. One tree yields from a half pound to a pound and a third.

Considerable discrimination is required in the selection of suitable grounds for the culture of coffee, which requires a much higher altitude than sugar. Situations must be chosen where the soil will not be washed away from the roots of the trees in the rainy seasons, and where the shriveling rays of the sun will not have too powerful an effect on the young plants. The sheltered slopes and valleys on the base of the mountains and the undulating sides of low chains of hills are usually preferred for the successful culture of the coffee berry. The plants raised on the highest elevations generally produce the best quality of fruit, and for the longest period.

After preparing the ground for the reception

of the young plants, by clearing it, burning the rubbish, enriching the soil with the ashes, and giving it several ploughings and levelings, dadap and kapok trees are planted to shade them, and ditches are dug in low situations to drain away the water, after which the coffee plants are removed from the nursery into the gardens; this is managed so as to bring the planting time towards the end of the rainy season. When the soil is not very fertile the plants are set about six feet apart, with dadap trees between them. If the soil is rich, a shorter distance is observed and fewer dadaps are required. It is found that the dadap affords the most desirable shade for the coffee-tree, and the higher the ground, the fewer dadaps are necessary.

A flourishing plantation on an elevated situation will produce the berry for a period of eighteen years, while on the lower grounds six or seven years is the allotted time, and the fruit is not so good. The coffee bush seldom exceeds sixteen or seventeen feet in height, and in good situations produces from one to twenty, or perhaps twenty-five pounds during its life. When the berries assume a dark red color they are carefully picked, one at a time, care being taken not to disturb the blossoms and unripe fruit still on the trees.

After the picking, the berries are spread on broad bamboo trays and placed in the drying-

house, a few feet above low fires, and the sun, prejudicial to the flavor of the coffee, is excluded. Coffee berries dried in the sun are lighter in color and weight than those dried by artificial heat, and the decoction made from the former is weak and insipid. Caution is required not to bruise the beans in separating them from the dried husk, after which they are packed in bags ready for the market. The superiority of the Java coffee is so well known that it is not necessary to speak of it. By many it is considered the best coffee in the world.

Tobacco is extensively cultivated in some of the higher districts. Tobacco lands must be exempt from inundations, and possess the richest soil. In locations especially favorable to the tobacco plant, it reaches a height of ten feet, and flourishes with a remarkable luxuriance. On the elevated regions in the interior of the island, tegal rice and tobacco are sometimes raised in alternate years with advantage on the same ground. The native is fond of tobacco for smoking, but siri takes its place for other purposes.

The pepper vine, which requires four or five years to produce fruit, grows luxuriantly in Java, and seems to thrive on almost any kind of soil. Its cultivation was at one time regarded as an important industry, particularly in the western districts of Bantam, but the government monopoly is said to have become so oppressive in its

character that it was abandoned, and the production of pepper is left to Sumatra and other islands in the archipelago.

Cotton is raised to some extent, but is of inferior quality. Neither the soil nor the climate appears to be very favorable to its growth. In some parts of the island the plant flourishes, but yields a meagre product; in other parts, the lowlands are unfit for it. It does best in localities devoted to mountain rice, but there a supply of cotton sufficient for the population cannot be obtained. The plant grows here about one and a half feet high, and the Javanese regard its cultivation with profound respect.

Java offers special advantages for the cultivation of indigo. A poor quality is produced as a second crop on the sawahs after the paddy has been harvested. The best quality comes from the highlands, where the plant reaches its greatest luxuriance. With proper selection of ground, it is allowed that indigo can be raised with success in Java the year round. It forms one of the principal dyes in the country, and is extremely cheap.

CHAPTER XX.

LAND AND GOVERNMENT.

THE proprietary rights of land in Java, with the exception of the few private plantations mentioned in the preceding chapter, are vested exclusively in the government. There is no law or custom which entitles the occupant of land, even though said occupant may have reclaimed it from the jungle, to consider it as his own, or as such to sell, will, or give it to any one whom he may desire to have enjoy the fruits of his industry. He can only convey it to another to hold till the expiration of his lease, when his plantation, with his seventy-five years' labor and improvement, returns to the general land-owner, the government, from whom it was purchased. The few planters who absolutely own their soil are but little better situated than the owner of a lease of this description. Their taxes are heavy, and they pay about as much for reaping from their own land as they would pay as tenants of the government.

The system of what is known as forced labor may appear to be an oppression or extortion practiced upon the poor native, upon the principle that "might is right," but this view of the matter

is scarcely correct, and it must be admitted that there is not a colony in the East that has been governed with the general result of peace, prosperity, and happiness which has attended the Dutch rule in Java. The natives are well cared for, enjoy the comfort and security of permanent employment, and are protected from the devastating wars and cruel rapacity of their own princes. It is true that the Dutch govern greatly to their own interests, the island of Java alone yielding an annual revenue, net, to Holland of from 23,000,000 to 25,000,000 guilders before the revolt of the natives in Acheen, on the north coast of Sumatra, in 1873. The expense of this long-continued rebellion has reversed the old order, and Holland, instead of receiving the yearly surplus from her colonies, and notwithstanding the increased taxes imposed, has to supply a deficiency counted in millions to meet the drain of the Acheen war, aside from the losses of commercial depression. These adversities, however, do not concern the traveler, who perceives only the general success of the policy of the government, and is surprised to find the same comfort, security, refinement, and cultivation on this distant island that he would enjoy in any capital or country in Europe.

The Dutch rule in Java requires the exercise of great tact and diplomacy. The old system of native government is retained so far as is possible, and the native rulers are still in power; at

the same time they are under surveillance, and transmit their orders as mere mouthpieces of the Europeans. In this way the enormous population is controlled through its own chiefs. Each district is governed by a native regent, and with him is placed a Dutch resident or assistant resident and a *contrôleur*. The resident makes suggestions to the regent, and recommends the grounds that are to be cultivated, which friendly advice the regent understands as laws that must be implicitly obeyed. The regent in his turn communicates with his officials, and so the desires of the resident are transmitted through all the grades of office, reaching at last the peasant that plucks the coffee berries. These regents receive ample incomes from the government.

The *contrôleur* assists the resident, inspects the proceedings in the native courts in the district, sees that no wrong or injustice is practiced by the village chief upon the common people and that every man is fairly treated, and looks after the management of the government lands and plantations.

The Soesoenan is the nominal head of his own dominions, the native provinces, but his prime minister, the Raden Adipati, is the actual ruler. The Soesoenan, although a sovereign, with a splendid court and retinue, has scarcely the liberty of leaving his palace without the consent of his "elder brother," the Dutch Resident, and must

always be attended by Dutch soldiers, under the appearance of an honorable escort. He receives a fabulous revenue from the Dutch, who manage his lands and control their revenues, while he amuses himself with his empty pomp, the flattery of his nobles, and the diversions of his harem. The succession to the throne descends from father to son, although the European government claims the right of deciding who shall reign, but supports as far as is consistent with its own interests and the prosperity of the people, the rights of primogeniture.

The administration of the general government as a whole is the same as that applied to each province or district; and, while the Javanese are encouraged in retaining their own laws and customs, the protectorate is careful to observe that those laws and customs are administered according to the interests of the European rule. The high priests insist upon the practice of the written law of the Koran, which is observed as modified by necessity. They are generally Mohammedan Arabs, and are charged with privately inciting the people to rebellion and discontent, though their ostensible occupation is the strict administration of justice and religious instruction, with exhortations to duty by precept and fable, some of which are highly instructive and impressive, as we perceive by the following examples, copied from their code of morals: —

“A man who does evil to his companions acts against the sacred writings and the lessons of his instructor ; he can never enjoy prosperity, but will meet with misfortune in all his proceedings. Such a man is like a piece of porcelain, which, when it falls to the ground, breaks into many pieces, and can never be rendered perfect.”

“The forest and the tiger lived together in close friendship, so that no one could approach the forest, for the tiger was always in the way ; nor the tiger, for the forest always afforded him shelter. Thus they both remained undisturbed, on account of the mutual security they afforded each other. But when the tiger abandoned the forest and roamed abroad, the people, seeing that the tiger had quitted it, immediately cut down the forest and converted it into plantations ; the tiger, in the mean time, taking shelter in a village, was seen by the people, who soon found means to kill him. In this manner, both parties, by abandoning their mutual duties to each other, were lost.”

“These are the qualities necessary to constitute a good housewife : she must be well made and well mannered, gentle, industrious, rich, liberal, charming, of good birth, upright, and humble. A stingy, curious, dirty, foul-mouthed, vulgar, false, intriguing, lazy, or stupid woman is not only entirely unfit for a housewife, but will never be beloved by a husband.”

CHAPTER XXI.

MANUFACTURES AND INDUSTRIES.

THE Javanese manufactures are very few and very simple. Where climate and taste render so little necessary for the comfort and happiness of the people, and where every family can supply its own wants within its own immediate vicinity, and without the aid of foreign articles or assistance of any description, there is slight incentive for the development of manufacturing skill, or encouragement for invention. Nature truly furnishes everything needed or desired by the Javanese. His climate, rice fields, coffee gardens, palm groves, and bamboo thickets supply all that he deems needful. He determines the size and quality of his dwelling to meet his wants and accord with his condition ; for the Javan, more than any other civilized individual, follows the demands of necessity, without any regard to art or appearance. He neither makes shawls, silks, gloves, nor beautiful china, though he has the materials for each. In his simple bamboo cottage, he would not know what to do with such superfluities, therefore they do not interest him. He is familiar with stone-cutting and brick-making, because he builds the

dwellings of the nobles, foreign merchants, and rich Chinese with these materials. He understands perfectly how to make thatch for his roof, mats for his bed, and cotton for his sarongs. He spins his yarn, and weaves his cloth without a loom, and paints and dyes the materials for his sarongs with the most beautiful colors. To prepare the white cloth for this purpose, he steeps it in rice-water; then, with hot wax forced through a short tube, traces or covers the figures he wishes to paint upon it, and dips the article in the dye, which makes no impression on the wax. The latter he removes by soaking the cloth in hot water; then he traces it again with wax, and dips it in a different dye, and so on till he gets all the colors and figures he desires. If his sarong is to have red or scarlet on it, he steeps the cloth in oil for several days before applying the wax and dye. This process imparts to the cloth a peculiar rich appearance, and a strange but not unpleasant odor, which it retains a long time. Silks are treated in the same manner, the designs and colors indicating the rank of the wearer. To make a sarong as just described requires from ten to seventeen days. The colors in the fine painted sarongs are exquisitely soft and beautiful.

We could add some thirty or more handicrafts to those already named in the preceding chapters, all of which are practiced with more or less merit. The tanner, stone-cutter, carpenter, tinsmith, and iron smith are always the most in demand. The

well-tempered blade of the kris brings a very high price, and the manufacture of its sheath is a profession in itself. On the coasts, the making of salt from sea-water, and fishing and the curing of fish, form occupations that employ a fair portion of the population. In the three largest cities, the manufacture of a spirit called "arrack," from rice and the sugar-palm, is a profitable industry. Foundries for different works in iron and mills for the manufacture of gunpowder have long been established. Tailors, seamstresses, painters, goldsmiths, silver workers, and artisans of many other useful handicrafts find constant occupation in the towns.

The care of the teak forests is an employment of some magnitude in Java, and is confined to a part of the population known as the Blandong people. The Blandong dwell in villages in and about the forests, and are occupied during eight months in the year in cutting and dragging the ponderous teak from their innermost recesses; the other four months are given to the care and watching of the young trees. Many other occupations could be named, and much more said about the employment of the people; but it will be seen that the ample resources of the fertile plains, the prolific sea, vast forests, and nourishing climate, supply an easy and agreeable livelihood, and the inhabitants of Java have little occasion to trouble their heads about inventions or manufactures.

CHAPTER XXII.

THE CHARACTER OF THE PEOPLE.

It is difficult to give a just idea of the personal character of the Javanese. Though not advanced in what is termed European learning or knowledge, they are by no means deficient in intelligence, or inapt in comprehending anything they have a strong desire to understand. They have made little progress in the arts and sciences, but they are quick in observing and judging correctly. They are acute and delicate in perception, docile and cheerful in disposition, willing to oblige and be obliged. When compared with the inhabitants of temperate zones, they are, no doubt, lacking in energy and perseverance, deficiencies that generally distinguish the native within the tropics, but which in the Javanese are compensated for by their admirable patience and faithfulness. When incited to action, they are frequently capable of great exertion, and will labor, for a short period, on a footing with any one. They are quiet, uncomplaining, and affectionate, fond of music, easily excited to wonder, and given to superstition, especially the lower classes, who recognize omens in every unusual event. They

are proud and full of religious prejudice, though much more liberal than the Mohammedans on the adjoining islands.

A somewhat voluminous writer on Java says, "The inhabitants of Java are proud, brave, lazy, and treacherous." This statement in reference to the Javanese is probably true if we are to consider them as soldiers; but a Javan seen as an humble, faithful friend and reliable servant, well treated and appreciated, bears a very different character. The sedate and listless appearance of the Javanese resembles stupidity; but few people possess a more ready apprehension, and they are veritable children in their simple credulousness. No matter how strange the phenomenon or how improbable the tale, they are willing to accept it. They discover signs and prognostications, either lucky or unlucky, in the countenance of a friend, in dreams, in certain occurrences on certain days of the month, in birds flying towards one or otherwise, and especially in taking the life of particular animals. To kill a gheko brings sure disaster to the slayer. To dream of a snake or a tiger foretells certain events, which they look for and speculate upon in advance. A stranger's taste and mode of dress, and manner of arranging his furniture in his room or dwelling, conveys to the sharp and discriminating eyes of the native a pretty correct idea of his general character. From seemingly the most trivial incidents the old and

experienced Javanese sometimes predict the great events in one's career, in a manner which the future proves to have been done with amazing certitude.

The nobles consider it a reproach to engage in trade, and the common people deem it an honor to follow the pursuit of agriculture. When new rice plantations are to be broken, the highest noblemen accompany their dependents to the grounds and take part in the labor, to do honor to the earth. In connection with this work the buffalo, as chief aid to the husbandman, receives great deference; so much, indeed, that new-born infants are often carried to the buffalo to be breathed upon by the latter, in the belief that it will bring them good fortune.

The Javanese are uniformly kind and gentle with each other; receiving the advice of the village chiefs and priests with the utmost veneration, and seldom refusing relief or assistance when it is needed. They treat children and aged people with extreme kindness, yielding to the counsels of age and experience with contented submission, and obeying the commands of their superiors with willing alacrity.

In the towns and capitals it is admitted that the natives are influenced by the bad example of the Europeans, and have, to a great extent, lost the simple and unaffected principles that distinguish them in the uncontaminated districts in the in-

terior. The lower classes are considered more honest, faithful, and ingenuous than the upper classes, among whom jealousy and ambition engender deceit, selfishness, and aggression, and the means of gratification encourages bitterness and passion, and promotes rivalries. All classes are universally hospitable and strictly temperate, generally living according to their income, never miserly, fond of display of dress and splendor, giving great attention to their persons, and scrupulously neat in their attire. If rich, their dress and jewels always indicate their wealth.

Jealousy sometimes urges them to deeds of violence, or a great wrong inflicted prompts indiscriminate destruction, and the indignant sufferer, unable to endure the imposition, and less able to avenge it, in a sudden frenzy of madness whips out his kris and runs amok (amuck), cutting and slashing at everything till run down and killed by his pursuers. Unprovoked assassinations are extremely rare. Petty thefts and robberies occur occasionally, but when kindness and confidence are extended they generally meet with commendable fidelity.

The effects of polygamy are not conducive to the elevation of their character. Among the upper classes its baneful influences are not difficult to trace ; family ties are not respected, jealousies are aroused, malignant passions often excited, and the active and combined influences of husband

and wife ignored. The Koran permits the Mohammedan to have four wives, and if a noble he is privileged to add as many consorts as he likes. The peasants and poorer people have generally, in a fashion, escaped these pernicious influences, and as a rule confine themselves to one wife at a time, or at most to two, compromising with their moderation by frequent change.

The Javanese rarely adopt new habits. It is their custom to rise as soon as daylight appears, bathe, partake of a little rice and coffee, and proceed at once to their fields, where they labor till ten o'clock, then return to their dwelling and eat their first hearty meal. From ten to four the heat is intense, during which time they remain in the shade of their huts and verandas, doing such work as their necessities require. At four o'clock they eat rice and drink coffee or chocolate, and return to the fields, to remain till six, when they seek their homes and partake of their second substantial meal, and spend the evening sitting together listening to music, or in quiet conversation.

The Malays living on the island are somewhat different in character from the Javanese. They are more active, show more enterprise, are more fond of trade and bargaining in a small way, more desirous of seeing the world and of adopting the ideas of foreigners, more passionate and vindictive, and although quite as intelligent, are by no means so simple-minded and ingenuous as the gentle Javanese.

CHAPTER XXIII.

RELIGION AND RANK.

THE faith of Mohammed is the established religion of the country, and came in with the overthrow of the Hindu empire of Modjopahit, in the year 1475. In 1511, when the Portuguese first arrived on the island, there was a Hindu king in Bantam; between that date and 1620, when the Dutch established a commercial settlement at Bantam, the whole country seems to have accepted Mohammedanism. The Javanese, however, are the least bigoted of the followers of the Prophet, and in this respect are very different from the Mohammedans in other parts of the world. Arab religious teachers are arriving constantly, and the Mohammedan law prevails, but in many respects it is blended with the ancient Hindu institutions of the country.

The Javanese chiefs and nobles make frequent pilgrimages to Mecca, and when they return to Java assume the utmost sanctity, which gives them such extraordinary power in practicing upon the credulity of the lower and uneducated classes that the government has deemed it expedient to discountenance the custom as much as possible.

The Mohammedan priests are credited with being at the bottom of every attempt at rebellion; and as the rebellions have greatly increased in late years, it may be inferred that the Arab teachers are multiplying, and that the Javanese are beginning to entertain a more ready appreciation of their own power and importance in a recognition of the natural wealth of their country, and in the knowledge of the strength which lies in their rapidly increasing population.

When the peaceful natives are incited to attack and slaughter the European intruders, which sometimes occurs, it is usually attributed to the intrigues and exhortations of the Arab priests, who, as religious teachers, possess an unlimited influence over the people. Every village possesses a mosque and priests, either Arab or their descendants, who conduct a Mohammedan service. These spiritual instructors decide everything of importance belonging to the native. In matters of fees, marriage, separation, divorce, inheritance, revenues, and cultivation of the lands, the priest determines. Every large town has a high priest, who presides over all the inferior priests in the subordinate villages and districts, and holds an ecclesiastical court to settle affairs that are too weighty for his assistants to decide upon. The number of priests in Java is said to reach several hundred thousand. They wear broad white turbans, long white gowns, cultivate a lengthy beard

on the chin, and affect a grave and dignified manner.

Circumcision is a religious ceremony with the Javanese, but in many other respects they seem to hold little in common with the Mohammedans of Arabia and continental India. For instance, they refrain from everything like noisy demonstration. They would rather eat pork than drink wine, while the ordinary Mohammedan can become very obstreperous, and, if compelled, would prefer to take wine and abstain from pork. Neither do they indulge that hatred and contempt for Christians as infidels that others of their faith evince. They cling to their ancient Hindu customs and superstitions, where opportunity sanctions the adherence, and regard with reverential pride the memorials of their ancient faith and grandeur.

As we have before observed, the Javanese pay great respect to sanctity, old age, and experience; and when these are accompanied with rank, there seems to be no limit to the excess to which their deference is carried. In any case, their respect for a superior is unbounded. No native of Java, no matter what his position or condition, would dare to stand in the presence of superior rank. Through all the various grades of title and office, from the Sultan to the peasant, this extreme homage is observed.

The princes of the royal family must not stand in the presence of the Soesoenan, and those of a

lower rank must not stand in the presence of the princes, and so it goes down to the village chief, each exacting the same respect from those below him. When a petty office-holder goes abroad, the common people sink down upon their heels while he is passing. This position is assumed upon all occasions when deference is demanded. Instead of rising, as Western nations do, to show respect when an important personage enters or approaches, they do the opposite, slowing sinking back and down upon their heels, and remain so till they manage to back out of sight.

When a native of high rank travels on the highway, the laborers in the fields drop their work, and assume the position described above as he passes along. Neither is an inferior allowed to reply to a superior in the common language of the country; he must reply in the language of honor, the court language. Under no circumstances can a superior be addressed in anything but the court language; therefore it is positively necessary for those who expect to communicate with superiors in rank, or with court officers, to possess a knowledge of this language. The higher rank, however, is privileged to address the lower in the ordinary vernacular. Children of good families are practiced in these distinctions from earliest infancy, and taught to observe them in their intercourse with their own parents. To approach a parent, a chief, or a superior in rank or

office without making the *sumbah*, a form of obeisance consisting in closing the hands together, raising them to the forehead, and inclining the body forward, is a breach of good manners never committed. Sometimes on great public occasions, where the rank is very exalted on one side, the inferior will humbly kiss the sole of the great man's foot.

When the Sultan or the Soesoenan leaves his palace, great state and ceremony are observed. An immense golden umbrella is carried at the head of the procession, followed by a numerous retinue of spearmen guarding the figures of the sacred bull and elephant, which with horses covered with rich trappings, and led behind them, precede the sovereign, who is sheltered by another golden *payoeng*. Boxes containing everything requisite for the sovereign are sometimes carried in the procession.

The regalia of state and the royal shield are all wrought of gold inlaid with precious stones. The handle of the kris of a rich noble is generally one blaze of diamonds, and the umbrella carried before him is always a costly affair, in yellow, white, gold, green, or red, according to his rank, the sovereign alone using the golden *payoeng*. Yellow is the royal color.

Many of their ceremonies have been handed down from the ancient Hindus. Before the Mohammedan conquest the sovereign was called the

Ratoe, instead of the Soesoenan, which title is a little more devout than Sultan. The titles of the royal princes and princesses were also changed after that period; but to enter into the names and distinctions of all these adjuncts of noble birth would create endless repetition and confusion.

CHAPTER XXIV.

SOME CUSTOMS AND AMUSEMENTS.

MARRIAGE contracts are made at an early age by the parents or relatives, on the ground that it is their duty to provide well for their children's future, and that the contracting parties are too young and too inexperienced to exercise prudent judgment. During the period between the asking and the marriage itself presents are made by the families to the bride. When all is ready, the father of the bride, accompanied by the bridegroom, proceeds to the mosque, where the chief priest collects the marriage fees and pronounces the betrothed parties man and wife ; after which the bridegroom returns to the house of his father-in-law, where the bride comes out to meet him with a low obeisance, in token of her submission to him during the remainder of her life. Feasts and festivals celebrate the occasion, and processions, with music, conduct the bride to the house of her father-in-law. If the parties possess exalted rank, sometimes cannon are fired and national music is played.

Divorces are frequent and very easily obtained. If the wife is dissatisfied with the husband, she

can pay a sum in proportion to her rank and be rid of him ; he on his part accepting her decree, considering it a disgrace to be connected with a woman who treats him with derision and contempt. The husband may divorce his wife whenever he pleases by returning her dower, or by providing her with a suitable support.

Some very singular ceremonies are observed when a child is born. As soon as it attains the age of nine months a sort of scenic representation and a festival are given. When a person of good position dies, the relatives meet at the house of death, to express their grief and distribute presents, particularly to the priests. The corpse is wrapped in a white cloth, laid on a bier, and, accompanied by the friends and relatives, carried to the grave, where, before interment, the priests address a prayer to the soul of the deceased, and after interment resume prayers and pronounce benedictions. The week succeeding the death, the same priests repair to the house of the deceased to pray with his relatives ; and at various stated times afterwards prayers are offered for the welfare of the departed soul. Instead of placing the dead body in a coffin, it is wrapped in a mat for committal to the ground. A camboga-tree is planted by the side of the grave, which is frequently kept strewn with flowers for years. Some of the cemeteries are very handsome, and the graves of the nobility are ornamented with

tombs bearing beautifully sculptured Arabic inscriptions. Priests are appointed to take particular care of these inclosures.

The Javanese have two dramatic entertainments that are considered somewhat interesting. In one, splendidly attired characters repeat a dialogue, and perform their parts in a manner similar to that of actors on a European stage, and this is attended with music. The other, often exhibited on the streets, is a sort of shadow-pantomime history of the valiant deeds of the heroes in the fictions and fables of ancient Hindu and Javanese mythology. The attention with which these performances are watched is inconceivable. The audience will sit silent and immovable a whole night, with their eyes fixed in breathless interest upon the representations.

The dancing-girls of Java, called the "bedaya," are distinguished by the utmost grace and decorum in their behavior. Their performances consist of graceful attitudes and convolutions of the body and limbs, and divers peculiar motions of the hands and fingers. They are gorgeously dressed, and almost covered with rings, necklaces, armlets, and jewels of the most costly character, and make their face, neck, and arms soft and yellow-looking with perfumed powder. The dance is rather grave than otherwise, and is performed to slow and solemn music. The bedaya are seldom above the age of fourteen or fifteen, and perform only in

the presence of royalty and persons high in rank and command.

There is another set of dancing-girls, known as the "rong'geng," that make a profession of the art; they are to be found in all the towns, and hire themselves out on all occasions. The native regents frequently keep a corps of the rong'geng for their special festivities. Their songs and actions are lacking in grace, and their conduct is sometimes highly improper.

Men execute a sort of posture dance at the court of the sovereign, with the shield and kris, or with the bow and arrow, going through the various exercises to the sound of music. They are naked to the waist, and cover their bodies with yellow powder, and assume all kinds of graceful attitudes in handling their shield or bow and arrow while passing in slow procession before the prince. There is another performance by the men, when they cover their bodies with green and yellow powder, and dance with flowers in their hands. On great public occasions the chiefs indulge in a spear exhibition, which consists in throwing the weapon into the air and catching it again with great dexterity.

Several peculiar amusements take place among the children, with the aid of music, and belong exclusively to the domestic circle, such as putting a basket over a child and covering it with a cloth, when singing and clapping of hands is performed

around the basket in time with music, till the child is regarded as put under a charm, when the basket rises, and the former slips out and dances in a seemingly unconscious frenzy, till it is apparently exhausted and sinks into sleep; then it awakens, and pretends utter ignorance of what has happened. In a special entertainment for children, a cocoanut, carved to resemble the face of a human being, is placed under a tree, where a spirit is supposed to enter it, and is then brought into the house and swung by two dancing children to music. Another popular amusement for children is to dress a number of persons to appear as animals in different attitudes and in combats, which are accompanied with the beating of the drum and gong.

On Saturday afternoon, the day on which the Soesoenan appears in public, all the princes, nobles, and high officers assemble on the great green square in front of the palace, taking places according to their respective ranks, to await the appearance of their sovereign, who, as soon as he has descended the steps, mounts a horse in waiting and rides around the immense waringin-trees, the nobles falling in behind him as he makes the circle. Tournaments and other exercises of like character now commence, especially tilting and the use of the spear, for which the Javanese show an inordinate fondness. Monday is the day on which the chiefs of the different towns appear, in the after-

noon, on horses ornamented with rich trappings, when the same entertainments take place among them.

The combat between the buffalo and the tiger is a favorite amusement. A tiger confined in a cage is placed in the centre of a large circle surrounded by spearmen, three or four deep. A buffalo is brought in, and men excite him by prodding him with nettles, etc. The cage door is opened and the tiger, enraged by the application of burning straw and maddened with pain, springs upon the buffalo, which gores him with his horns. The buffalo generally conquers, destroying sometimes two or three tigers, and dying himself in a few days from the wounds he has received. If the tiger survives, he rushes toward the wall of spears to make his escape, and is immediately dispatched by the spearmen plunging their weapons into him.

Stag-hunting is another diversion among the Javanese, but chiefly in the eastern districts. The ram and the wild hog are sometimes brought out on the green to fight, and they furnish an amusing spectacle, the ram retreating, when his antagonist gets the advantage, to a small covering for protection, where he waits for a favorable opportunity to rush out and avenge himself. Cock-fighting, quail-fighting, and cricket-fighting are favorite sports among the common people.

Dice, chess, and checkers are ordinary pas-

times, to which are added many other games of chance and skill peculiar to the archipelago. The natives are also very fond of betting, and will lay a wager on any trifling uncertainty, such as the flying of a kite, the number of kernels in a nut, etc. In these games and contests, the pieces or animals, whichever they may be, that are engaged generally represent the Javanese on one side, and the foreigners on the other, or the kings, queens, and princes of the former contesting with their enemies. Consequently these performances are watched with the deepest interest, and when the objects representing the Javanese triumph the delight of the people is unbounded.

CHAPTER XXV.

THE LANGUAGE.

THE Javanese language is more or less intermixed with the various dialects in use in several of the surrounding islands. The characters are the same, and it is the opinion of some learned linguists that one generic language prevails throughout the islands of Java, Bali, and Madoera. Four dialects are spoken in Java. Malay, the general language of the archipelago, is spoken in the cities on the coast, where the population is either Malay, or mixed Malay and Javanese. In the western districts of Java the Sundanese is spoken, and in the eastern provinces the Javanese language is used exclusively. The language of honor is spoken at the native court. The Sunda language is alleged to be the most ancient, and is a simple dialect, meeting all the wants of the simple people that speak it; many of its words are pure Malayu, some are Sanskrit, and much of it is from the Javanese.

The Javanese alphabet is composed of twenty consonants; in addition to which there are twenty auxiliary characters, used in forming the compound consonants. In addition to these there are

seven characters, consisting of contractions of certain consonants which are used in connection with other consonants. There are five inherent vowel signs, and five signs which supplant the inherent vowel.

The Javanese write from right to left, make the letters entirely separate, and leave no space between the words. A comma or a diagonal line at the end of a composition indicates a period, and is the only mark of punctuation used. They have no grammar, but the construction of their language is regular and extremely simple. It contains many synonyms, and is wonderfully profuse in words, expressing the most profound, delicate, and complicated shades of meaning. There is also a great variety of dialects or distinctions between the language of honor and the language of the uneducated, as referred to in a foregoing chapter.

Children are first taught to draw their letters in the sand, and then to follow the word or object in all its ideas and applications, so as to acquire a full understanding of many synonyms belonging to it. The exercise prepares them for an acquaintance with the court language, which contains much of the Malayan and numerous words of Sanskrit origin, mixed with the Javanese and an extensive addition of foreign words. Beside the four languages or dialects in use in Java, there is a classic language, called the

Kawi, in which the fables, poems, historical records, and various inscriptions on stone are written. At what remote period, or how, the Kawi language was introduced into Java appears to be uncertain; but it is supposed to be the channel through which the Javanese received their store of Sanskrit words. A Javanese scholar, in writing, uses many words from the Kawi, which may have been the one original language employed throughout the archipelago at some earlier and unknown time. The Javanese language is rich, copious, and refined, and suited to an advanced and cultured people; it is flexible and easily adapted to all occasions, and abounds in graceful and delicate distinctions. It is soft and harmonious, readily acquired, and clings to the memory.

The most important compositions in the ancient literature of Java are written in the Kawi language, and seem to consist of mythological and fabulous accounts of Hindu and Javanese heroes and their miraculous feats in love, combat, conquest, and religion. What is termed the modern literature of the Javanese is generally written in verse, and frequently describes the pure character of a beautiful woman, with her virtues and devotion to God. They possess some Arabic compositions which relate to religion, and are increasing. Their poetry is elevated in sentiment, and seems to take the character of advice and instruc-

tion. An epic poem, called the Holy War, is a great favorite, and furnishes the characters for one of the most popular scenic representations of early mythological Javanese history.

The acting of these poems, when accompanied with the music of the gamalan, possesses great interest for all classes of society. The music of the gamalan salindeo, their largest and most perfect band of musical instruments, adds much to the impressive representation of the performances of the gods, demigods, and heroes of Hindu and Javanese fictions. The Javanese gamalan is composed of from fifteen to sixty wooden and metal instruments, the most noticeable of which are the gongs and xylophones, which are struck with wooden hammers covered with elastic gum. Some of the instruments are stringed, and played like the harp. The drum is struck with the hand and fingers, and the various bamboo wind instruments are played like a flute. The music is rather sad and monotonous, but by no means unpleasant.

In drawing, painting, sculpture, and astronomy, the Javanese of the present day show little interest or proficiency. They are not deficient in proper ideas nor insensible to pleasing proportions, and can copy an original fairly well, but they seem indifferent to knowledge in these directions. The vast and magnificent ruins sprinkled over Java bear testimony to grand conceptions and perfect execution in some of the arts, espe-

cially in sculpture and literature, but at a period so distant that it is impossible to decide whether they were the work of the Javanese themselves, or of artists brought perhaps from continental India.

The remains of these wonderful temples and palaces assure us that Brahma, Vishnu, and Buddha were once the gods of the people, and that the Hindu Empire was supreme. With the destruction of the latter in 1475, and the establishment of the Mohammedan religion, great changes came in; and if the arts and sciences were known to any extent by the Javanese themselves, they have been forgotten.

They are quite ignorant of astronomy, and when an eclipse of the sun or moon occurs they assemble in affrighted groups, watching the phenomenon, and attributing the passing shadow to the visible anger of an insulted God. In some districts the common people suppose the invading planet to be a great monster about to swallow the sun or moon, as it may be, and shout, and pound on their tom-toms, to make a terrific noise and scare him off. They divide their year into twelve seasons, determined by the course of the sun, and carefully observed upon account of the planting. Their week consists of five days, each day and night divided into five portions, distinguished by a special name. They compute their time by the Arab year, but retain the date of their own era,

or the era of Aji Saka, instead of that of the Hegira. Aji Saka was the name of a great reformer, who appeared in Java seventy-four years after the birth of Christ, and the Javanese date their era from the arrival of this prince.

CHAPTER XXVI.

ANCIENT TEMPLES AND PALACES.

TO attempt a description of the superb architectural ruins and the myriads of fragmentary treasures in sculptural art and design, that bespeak a high antiquity for Java, would be a quite impossible task. In the vicinity of former cities, the grounds are literally strewn with broken arch, dilapidated column, and decaying statuary, giving ample evidence of the vast and magnificent structures of which they were once a part.

Very little that can be deemed reliable is known as to who worshiped in these gorgeous temples and dwelt in these spacious palaces, or by whom they were designed, or constructed. That the people were not only civilized but highly cultivated is clearly proven by the memorials they have left behind. On what part of the globe this ancient race first had its birth, where it learned the cunning device of chisel and hammer, or from whom it received the inspiration so elegantly wrought in metal and stone, is left to tradition and conjecture to determine. We have the evidences of Hindu worship, but for aught else we can only gaze upon the crumbling monuments

of their wealth and magnificence in wonder and amazement, and deplore the absence of history to describe the people and the remote period which produced them. The Javanese of to-day cannot tell us anything. The broken images, the fallen idols, the ancient deities and sculptured inscriptions, are to them as tales of fiction. The story they relate is wonderful, — too wonderful, — and there they stop.

For centuries the Javanese have been Moham-medans, and have consequently regarded with distaste all vestiges of idol-worship. As the ages rolled away, this sentiment led to indifference and ignorance, superseded by wonder and awe. The stupendous temples appeared to them not made with hands, and, being by nature superstitious, they avoided the relics and symbols which seemed to proclaim supernatural work, and allowed their beautiful treasures to become lost to sight, — hidden and buried, as it might happen, in the dense and luxuriant growths of the country.

These ancient ruins are thickly strewn throughout whole districts in the interior of Java. They spread over the plains, sprinkle the forests, and climb the mountain sides, especially in the Dieng mountains, where the extensive remains of demolished structures, in the shape of broken walls, dilapidated steps, crumbling porticoes, deposed idols, and beautiful specimens of sculpture, crown the hills and cover the declivities nearly to the highest summits.

One of these elevations, which is by no means extraordinary, in view of others in the neighborhood, is particularly noticeable. It slopes upward to an immense platform or plain, some six or seven hundred feet above the surrounding country which is covered with the débris of temples, and perhaps palaces, that must once have been counted by hundreds. This tableland is reached on its four sides by flights of stone steps, much dilapidated, but still of assistance in gaining the high level. An extinct crater and masses of rock and lava seem to indicate an eruption, with a concussion, perhaps, which has broken the steps. The walls of some of these structures on the plain were built of smooth blocks of stone, and were about ten feet thick, sometimes inclosing one large square chamber, with a high stone roof arched to a point. Broken pieces of sculpture, images, decaying Hindu gods, and decapitated statuary not only cover the plain, but abound in every direction in this part of Java, showing how extensive and numerous were the temples and edifices they once adorned.

The country between Djokjokarta and Soerakarta is famous for its remnants of ancient edifices and relics of Hindu worship. In the neighborhood of Brambanan, a town on the road between the two last-named cities, stand the extensive ruins of an ancient temple, which is one of the many in the immediate vicinity that would

amply repay the traveler's attention. Although the walls, some twelve feet thick, are broken, the massive blocks and figures thrown down, and the great rooms dismantled and filled with rubbish, enough remains to show the magnitude of the temple, the size of its doors, the character of its apartments, the number of its figures, and the superior execution of its stone lions and elephants. The giant figures of its porters guard the doors, in crumbling dress, with bracelets, beads, ear-rings, plaited hair, waistbands, and daggers still clearly defined; even the expression of their features can be detected. They have broad heads, wide, full foreheads, and short, square chins, round, full, staring eyes, thick lips, and open mouth, revealing large, long teeth, the whole wearing a mirthful and pleased look. The walls are composed of smooth blocks of stone, put together without cement or mortar, and dislodged in many places by trees having forced their growth between them.

Within a short distance of this ruin is another, or rather a group of ruins, consisting of some twenty or more separate edifices, each furnishing evidences of having been a temple. The rooms are spacious, the buildings apparently having been large and lofty, with terraces and niches containing lions couchant, and pilasters supporting bands of stone, some of which are carved in beautiful running designs and festoons, encircling birds

with wings outspread. In one instance a string of monkeys is represented in a wood, which might indicate the worship of Hanuman, the monkey god. In every case the sculptures display beauty and fine workmanship. Some of the stone blocks are immense in size, and, like those in the other temples, shaped with perfect precision, and put together without cement of any kind. Lions, elephants, and the lotus flower were present in the decorations. A portion of the god Genesa shows that he was also represented. There is no other indication, however, that the temple was devoted to the mighty son of Siva.

Leaving these ruins, we make our way north of the town of Brambanan to another cluster of ancient structures, the temple Loro Jongrong, which is the Javanese name of the Hindu god Devi. This temple appears to consist of one large building, now in ruins, connected with several smaller ones. After scaling a mound of stones and rubbish, we reach an entrance with an image of Loro Jongrong, in good preservation, and her buffalo, still smooth and polished, lying before her. Genesa sits on a polished throne in front of an entrance on the other side, the stones of the intermediate corner being covered with beautiful designs of running flowers and foliage, also small human figures, and other decorations of the same character, producing an effect wonderfully rich and striking. The god is in full dress and elabo-

rately decorated ; a hooded snake is wound round his body.

Close to the high road and about half a mile from the Loro Jongrong is another ancient pile, known as the Thousand Temples, beside which those that we have seen sink into insignificance. It consists of two hundred and ninety-six temples, which cover a space said to measure five hundred and forty-five feet by five hundred and ten feet. The buildings are arranged in five parallelograms, one within the other. The outer square comprises eighty-four temples, twenty-two on each front and twenty on the sides. The next square has seventy-six, the third forty-four, the fifth and central twenty-eight. The temples are alike in size and construction, each being about eleven or twelve feet square on the outside, with a vestibule and door opening into a small square room. Opposite the door is the throne of the idol which once occupied the apartment. The walls of each temple are nearly three feet thick, and are smooth and square to about seven feet in height, when they begin to slope into a pyramidal roof, with square top covered by a single stone. The whole structure forms an immense pyramid, each parallelogram receding and apparently making one of five gigantic steps. The roofs are plain, with running bands that form a sort of crest to each square or step. Two huge and hideous porters guard the principal entrance, with raised clubs, warning

away unlicensed intruders. Each has a ferocious mustache and long curling hair, with chains and snakes twisting diagonally over his body and shoulders and about his arms. Both wear earrings, necklaces, and bracelets. A pair of more formidable or repulsive custodians could not be imagined. Streets or spaces about twelve feet wide run around the squares between the rows of temples. The innermost square was the great temple, or principal shrine. The walls of this building are five or six feet thick, with a terrace surrounding it, reached on each side by flights of dilapidated stone steps. Niches, vestibules, figures of animals and gods, are abundant and conspicuous in each temple, the gods alone numbering thirty-four hundred and seventy-eight. All are light, chaste, and graceful, exhibiting many superb specimens of Hindu sculpture and architecture. Each single building forms a small pyramid. They are all in a more or less decayed and falling condition, and some are down and quite concealed in the dense shrubbery. A spreading banyan-tree has helped the work of destruction, by forcing its trunks through the walls, and then covering them with its branches.

The holy of holies is in the interior temple, and is reached by ascending the steps to a superb portal, which gives entrance to a wide passage through the walls, which are ten feet thick, of solid blocks of gray stone, closely joined together without

cement. The inside of the chamber is a plain square, the walls rising some forty feet before assuming the pyramidal form, with overhanging stones sloping to the apex of the roof, where a small opening is covered, as usual, with one broad stone. A raised platform, probably the throne of the principal divinity, extends across one side of the chamber; but there is nothing to indicate which one of the Hindu gods it was that filled the place of honor. Although the inside walls of this great chamber are perfectly plain, the exterior walls are decorated with a profusion of ornamental sculptures; but there are no niches holding images or anything emblematical, as in the smaller temples, each of which is supplied with thirteen niches, containing figures from heathen mythology.

As the traveler proceeds towards Djokjokarta, the ruins of ancient edifices come into view on every side, some of them the mouldy sites of ancient temples, others perhaps of palaces. One especially strikes the eye. Great skill, labor, and patience are displayed in this monument of heathen splendor, which looks more like the residence of an ancient Rajah than a temple of Hindu worship. Its exterior is profusely decorated with delicate and beautiful sculpture, better suited to the inside of a rich and handsome apartment than to the outside walls of a building.

Before reaching the capital, the crumbling

structures and heaps of débris, indicating decaying ruins, become so numerous that they cease to excite surprise; therefore, leaving them, as well as the many other old emblems of wealth and grandeur that particularly distinguish the country adjacent to the great capital of the ancient Modjopahit, we shall make a gigantic leap westward into the province of Kadoe, and inspect the vast and magnificent temple of Boro Bodo.

This wonderful structure, which is supposed to have been built either in the sixth or tenth century of the Javan era, and is the largest and most elaborate Hindu temple in the world, covers the crown of a hill, and presents a square pyramidal building of stone, consisting of seven receding ranges of walls and terraces, terminating in an immense dome. A triple row of seventy-two towers encircles the dome, each tower occupied by a figure. Superbly sculptured walls support the terraces which run around the hill itself, each wall surmounted by a parapet carved on both the interior and exterior sides. Niches, at short intervals, each containing a huge naked figure sitting cross-legged, break the uniformity. Small spires surround the niches, and also dot the top of the parapets at regular distances. The number of niches containing figures is nearly four hundred. The sculptural designs and architectural ornaments are profuse, and are beautifully wrought; if placed in a straight line they would reach a distance of five miles.

The whole building is decorated with bas-reliefs, and extends over six hundred feet each way. Handsome gateways lead to the successive terraces, the conical shape of the hill seeming to fill the interior of the temple. The image of Brahma is said to have been found near the temple of Boro Bodo, but, as in the case of many others, there is no certainty as to whether the edifice was devoted to the worship of Buddha or Brahma; several interesting ruins in the vicinity, however, clearly indicate the worship of at least one member of the Hindu trinity. To describe the relics of antiquity in Java would fill a large volume, therefore, as with many other interesting subjects belonging to this unique island, want of space compels us to leave them with this brief notice.

CHAPTER XXVII.

EARLY INHABITANTS.

ACCORDING to a written tradition, the first inhabitants of Java were supposed to have been a people that were banished in remote ages from Egypt, and, sailing along the southern coasts, came to what is now known as the East Indian Archipelago, but was at that time a part of the unbroken continent of Asia, since divided by some terrible convulsion of nature into the numerous islands composing the above-named division. These people, as described, were rude, wandering tribes, consisting of individuals possessing various religious beliefs and forms of worship, which they set up in the land where they at last found a home. Some of them worshiped the sun, some the moon, others different inanimate objects in nature. They had no form of government, the great respect and obedience that they cherished for the counsels of old age making the oldest man in the tribe or community their chief, whose judgment controlled their movements and appointed the times for moving from one place to another, and was governed by the gyrations and flight of a bird, supposed to be a crow or raven.

The same custom is still followed by some of the savage tribes in Borneo. These immigrants seem to have been an agricultural people, as the record states that when it was necessary to move to new localities, the crops were gathered, sacrifices made, and feasts given on the plains, from which the participators retired, leaving the remnants for the bird. If, after partaking thereof, it flew in the direction in which they wished to go, a young animal was offered to the deity, a second feast was enjoyed, and the community set out with music, shouting, and other demonstrations of joy. If, however, the bird hovered over the plain, or circled around in the air, or sat on a tree, or flew in a direction opposite to the one they proposed to take, they repeated their prayers and renewed the sacrifices, and waited till the favorable omen was bestowed.

Another traditional account referring to Java, and related by a very ancient author, reads as follows:—

“The first inhabitants were Siamese, who, about the year 800 of the Christian era, on their passage from Siam to Macassar, were driven by a great storm on the island. Their junk being wrecked, they escaped in their boat and arrived at Java, until that period undiscovered, but which, on account of its size and fertility, was immediately peopled by Passara, son of the king of Siam; and the city of Passaran, called after his

own name, was founded at a very good seaport, and was the first settlement on the island."

A third record is found in ancient Javanese literature, which has been translated thus:—

"Praboe Jáya Báya was a great and powerful ruler of Astina, and the fifth in descent from Arjuna, the son of Pándoe Dewa Náta; after whom had reigned successively Bimanyoe, Parakisit, Oedayana, and Gandra Yána. His chief minister, being a man of great enterprise and ability, was sent to visit and civilize foreign countries. In the course of his travels, he landed on Java, then the abode of a race of Kasaka, and known by the name of Noesa Kendang. This happened in the first year of the Javan era, and is distinguished in the Chandra Sangkala by the words 'nir, abu, tampo, jaler;' meaning, literally, 'nothing, dust, not anything [but] man,' and metaphorically, the figures 0001.

"He here discovered the grain called 'jawa-woet,' at that time the principal subsistence of the inhabitants; and in consequence of this discovery he changed the name of the country from Noesa Kendang to Noesa Jawa. In his progress through the island he met with the dead bodies of two Kasaka, each holding a leaf with an inscription on it, one in ancient, the other in Siamese characters; these he united, and formed the Javan alphabet of twenty letters.

"He had several combats with the Kasaka,

particularly with one Dewata Chengkar ; and after fixing the date of his different discoveries, and leaving mementoes of his visit wherever he went, he finally returned to Astina, and delivered a written account of all he had seen and done."

This traveler is supposed to have been Aji Saka, who, it appears, found the island inhabited, and from whose alleged arrival the Javanese date their first era, which corresponds with the seventy-fifth year, though some chroniclers have put it the seventy-fourth, of the Christian era. Aji Saka is represented by some as having been a great and powerful sovereign, who established the flourishing colony of Java ; other accounts speak of him as a deity who sailed over land and seas to get to Java. It is averred, however, that he was the first to introduce regular government and civilization. The Javan era is said by some to have commenced with his death.

Setting aside tradition and the ancient mythological history of Java, we may be fairly justified in regarding the statements of ancient manuscripts found in eastern Java as a more or less reliable record of actual dates and events. These last accounts relate that at about the period when the government was transferred to Pajajaran, a Brahmin named Tritristra landed on Java, with numerous followers, introduced religion and art and established the era, and is therefore regarded as identical with Aji Saka. The line of Hindu

sovereigns, dating from that event to the destruction of the Hindu Empire at Modjopahit, on the conquest of the Mohammedans, extends over a period of fourteen hundred years, ending 1475 of the Christian era, and numbers thirty-eight princes who reigned successively in Java and the adjoining islands. Other records, which attempt to draw a distinguishing line between the Hindu princes and the Javanese sovereigns, put the accession of the latter five centuries later.

Of the high culture, advance, and civilization of ancient Java, however, we have ample evidence in the stupendous ruins and multitudinous relics of refined art to be seen in the decaying remains of the cities, palaces, and temples in the neighborhood of Brambanan, to the construction of which different dates have been ascribed, and which settle without question the existence of the worship of the Hindu religion in the early and obscure periods of Javanese history.

CHAPTER XXVIII.

INTRODUCTION OF MOHAMMEDANISM.

OMITTING the records of many centuries relating to the reigns and successions of the Hindu princes, which give a much greater antiquity to Java than has been supposed, we reach the reign of Dewa Kasoema, who is said to have established the kingdom of Jang'gala, and built its capital about the year 846. Its ancient site is still to be seen in the forests near the modern city of Soerabaja.

It is related of Dewa Kasoema that he sent his four sons and one daughter to India, to be instructed in the worship of Brahma, and when they returned he divided his kingdom among his sons; consequently, at his death, Java was separated into four sovereignties. Panji, the grandson of this prince, became the favorite hero of a celebrated Javanese romance, which furnishes characters for one of the most popular dramatic performances of the country. The Javanese still revere his memory, and with pride allege that he introduced the wearing of the kris into all the countries over which he reigned, and that these are now determined by the inhabitants wearing that weapon thrust into the belt behind.

Leaving out the heroic deeds and marvelous enterprises of Panji, as related in Malayan romance, also the reigns of other princes, we come to the tenth century and the reign of his descendant, Koeda Lalean, who, it is stated, built a city, and gave it the name of Pajajaran. He had two sons, the younger of whom succeeded him in the year 1037, since the elder son had not returned from foreign tours, upon which he had departed before his father's death. Seven years after the latter event, this son, accompanied by an Arab descended from Said Abas, returned, with the title of Haji Poerwa, from a residence in India, where he had become a convert to the religion of Mohammed. The return, and the attempts of Haji Poerwa and his companion to proselytize his brother, the pagan king, were the supposed introduction of the Mohammedan religion upon the island of Java.

The next Prince of Pajajaran had a son, the circumstances of whose birth seemed to foretell the fulfillment of avenging predictions made by a devotee whom the prince had unjustly executed. To prevent the accomplishment of this prophecy, he decided to destroy the child. His project was defeated, however, and the boy grew up unknown to his parent. Arriving at maturity, the youth contrived the destruction of his father, thus fulfilling the prognostications of the devotee, and assumed the reins of government, which brought on

a war between him and his brother, Raden Tandoeran, resulting in the defeat and escape of the latter. Raden Tandoeran, wandering with two or three followers on the mountain of Cheribon, met his sister there, doing a penance. Advised and encouraged by her, he followed the course of a bird, which she released for the purpose, eastward into the district of Wirasaba. Here, wishing to eat of the fruit of a vine called "modjo," and finding it bitter, he threw it away, inquiring of Kiai Wira, one of his followers, the reason of its excessive bitterness.

"I have heard," returned Kiai Wira, "that it was here your forefathers fought in the war Brata Yoedha;" on which the prince replied, "Then let us stay here and establish our kingdom, and let us call it Modjo-pahit," — literally, the bitter modjo. This was in the year 1146 A. D., and was the first establishment of what afterwards became the powerful empire of Modjopahit.

We will pass over the dissensions and succeeding wars between the two brothers and their respective adherents, terminating in a mutual agreement to separate the two kingdoms of Pajajaran and Modjopahit, with the successive reigns, continued triumphs, and undisputed establishment of the last-named empire. According to the annals, the kingdom of Modjopahit increased in power and splendor till it reached the highest pinnacle of national glory, and gained undisputed sover-

eignty over the whole of Java, the surrounding islands, and part of Sumatra. Her last sovereign was Angka Wijaya, who succeeded his father, Alit Wijaya, fifth prince of Modjopahit.

During the reign of this monarch, and in the latter half of the fourteenth century, a second attempt to establish the Mohammedan faith in east Java appears to have been made at Gresik, the account of which has been translated as follows :

“Moelana Ibrahim, a celebrated Pandita from Arabia, descended from Jenal Abidin, and cousin to the Rajah of Chermen (a country of Sebrang), had established himself with other Mohammedans at Desa Seran, in Jang’gala, when the Rajah of Chermen arrived at Java. This prince, who was a Mohammedan, perceiving with regret that the inhabitants of the large and populous island of Java were still heathens, resolved to attempt the conversion of the King of Modjopahit, Prabu Angka Wijaya, and, with this view, to present him his maiden daughter in marriage. Embarking with his daughter and all his relatives and followers of every description, he reached Jang’gala in safety, and landing at the Desa Seran, he immediately built a mosque there, and in a short time succeeded in obtaining many converts.” Moelana Ibrahim died in 1408. His tomb, known by the name of Gapoera Wetan, is still to be seen.

The next missionary described as doing special religious work in Java is Raden Rachmat.

CHAPTER XXIX.

THE FALL OF MODJOPAHIT.

PASSING over the many interesting details connected with the reign of Angka Wijaya, concerning the increasing prosperity and extension of his powerful kingdom, we will follow that part of his history which relates to the overthrow of his empire and its final conquest by the Mohamedans.

Angka Wijaya, hearing in the beginning of his reign of the beauty of a princess of Champa, dispatched an embassy to that country with a demand for her hand in marriage. Previous to this, her father, the Rajah of Champa, had given his eldest daughter in marriage to an Arab priest, whose name was Rachmat. When the foreign princess arrived, she found her admirer had already one consort in a Chinese princess of great beauty, who had been sent to him as a present from a chief in China.

The princess of Champa continuing to show her displeasure, her husband at last determined to dispose of his Chinese beauty by giving her to his illegitimate son, Aria Damar, who, having gained the approbation of his father by his brav-

ery and success in war, had received the title of Adipati, and had been appointed chief of Palembang, on the coast of Sumatra. Aria Damar proceeded thither with the Chinese princess and several hundred troops, and had not been there long when he received a visit from Raden Rachmat, the son of the Arab priest and the eldest princess of Champa, who, having been carefully instructed in the Mohammedan faith, was on his way with letters and presents to Modjopahit. Arriving at the capital, he was kindly welcomed by Angka Wijaya, who, soon conceiving a great attachment for him, established him at Ampel, with rule over three thousand families. The sovereign, although he would not adopt the young priest's religion, gave the latter permission to proselytize as much as he pleased. It was not long before Raden Rachmat had won the confidence of his province, and the people gradually embraced his religion, and gave him the title of Soenan of Ampel, which title eventually became Soesoenan, sometimes Soesoehoenan, a title still retained by the Javanese sovereigns.

The arrival of another Arab missionary at Gresik is described as follows:—

“Moelana Ishak, otherwise called Moelana Aloel Islam of Pasi Malaca, a celebrated Pandita, who had given himself up to penance and mortification, having learned that there was at Ampel, on Java, a prince who was busily employed in

propagating the Mohammedan religion, and that many persons through his means had embraced the faith, went over and assisted Soesoenan Makdoem in the work of conversion; and having received his sanction to go to Balambangam for the purpose of teaching the Mohammedan religion, then embarked in a prahoe, and set out on the sacred mission."

While the work of conversion was thus going forward in the eastern provinces, it was advancing with equal success in the western provinces under the instruction of the Sheik Ibn Moelana, who had established himself at Cheribon in the year 1409 A. D.; and his abode being on a wooded hill, he was known as the Soesoenan Goenoeng Djati (messenger of God on the mountain of teak). Healing a woman afflicted with leprosy, hitherto regarded incurable, the Sheik acquired the reputation of performing miracles, which brought such crowds to the mountain that the chiefs deemed it their duty to interfere, but finding the numbers and influences too powerful, many of them embraced the faith.

In the mean time, mosques were erected at several places by various powerful Mohammedans, and the number of converts steadily increased. Modjopahit had now reached the zenith of her glory; her authority was acknowledged by all the surrounding countries, and there were very few of the eastern isles which did not pay tribute to her

extensive dominions. About this time, the sons of Aria Damar, now grown up, came from Palembang to Gresik, and with them their half-brother, Raden Pateh, the son of Angka Wijaya, born after his mother, the Chinese princess, had been given to their father, Aria Damar. Raden Pateh, becoming aware of his extraction, and enraged at the treatment his mother had received, refused to proceed to the splendid capital, and remained with the Soenan at Ampel, while his half-brother Hoesen went to Modjopahit, requested not to say anything about Raden Pateh. Hoesen met with a gracious reception, and was soon assigned to an important command of troops.

Raden Pateh married the granddaughter of the Soenan at Ampel, and removed westward, in accordance with instructions he had received to establish himself at a place where he should find the sweet-scented grass, bintara. This he discovered near an extensive swamp called "damalakan," where he founded an establishment, first named Bintara, and afterwards Damak, a contraction of the word "damalakan."

The Prince of Modjopahit, hearing of this new settlement, sent Hoesen to destroy it, unless the chief acknowledged the supremacy of Modjopahit. Hoesen persuaded Raden Pateh to go back with him to the capital, where he was recognized by his resemblance to his father, and was afterwards permitted to return to Bintara with the title of

Adipati. Instead of doing so, however, he went to Ampel, and expressed to his wife's relation the rage and mortification he had experienced upon account of the discovery of his birth, and the resolve he had formed to destroy Modjopahit.

The Soenan tried to bring him to submission, and reminded him that his religion did not permit him to make war upon one from whom he had received so many benefits, and Raden Pateh proceeded to Bintara, where he continued to prosper and make converts. His anger mollified, he commenced the building of a mosque, which work was interrupted by the illness of the Soenan at Ampel, to whose bedside Raden Pateh, accompanied by the Mohammedan chiefs, immediately repaired. The Soenan died, and the Prince of Modjopahit according every honor to his funeral, Raden Pateh returned, seemingly satisfied, to Bintara, and, assisted by eight missionaries, who had each assumed the title of Soenan, completed the mosque, causing it to be constructed with eight pillars, typical of the eight holy men who had aided in its erection. This was in the year 1465.

Raden Pateh, now falling in with advisers less conscientious than the departed Soenan, entered into a confederacy with his associate missionaries to exterminate the pagan empire of Modjopahit.

The Mohammedans, become numerous and powerful, flocked to his assistance, except Hoesen, who remained true to his sovereign, and Raden

Pateh made an open declaration of war. The Mohammedan army marched against Modjopahit, but was kept in check by Hoesen, who commanded the forces of Modjopahit, and for four years managed to avoid a general engagement. This long delay and uncertainty produced dissatisfaction. A decisive movement was demanded, and a battle ensued, wherein the Mohammedan chief Soesoenan Oendang was slain and his army completely routed. Hoesen's affection for his half-brother Raden Pateh was ascribed as the reason why he failed to follow up this advantage.

The Prince of Modjopahit now made overtures to Raden Pateh by inviting him to the capital, that he might endeavor by kindly offices to reduce him to obedience. The Pateh promised compliance, but made illness and other excuses a reason for deferring his visit. His province, meanwhile, paying the usual tribute, deceived the prince and averted vengeance, while the Raden prepared for another attack.

Depredations in other parts of the kingdom distracted the attention of Angka Wijaya, and rendered him insensible, perhaps, to the threatening attitude of the immediate members of his own family, while the Mohammedans, receiving strength and support from their increasing numbers, concentrated their troops at Damak, and made ready for a second onslaught on Modjopahit. Their progress is thus described: —

“The army of the faithful, highly elated, and determined upon the downfall of paganism, were met by the united forces of Modjopahit, under Hoesen, and a severe and desperate battle took place, which lasted for seven successive days. In this protracted engagement the former were at first worsted; but the commander, Pangeran Koe-das, availing himself of the enchanted box and miraculous weapons, at last succeeded in driving the enemy before him, and the city of Modjopahit, surrounded on all sides, submitted to the hostile forces. The prince and his immediate followers quitted it in disorder and fled to the eastward.”

Thus the long line of Hindu kings in Java, numbering thirty-eight, commencing with Aji Saka, and continuing fourteen hundred years, was suddenly broken by the power of a foreign religion, and their rule superseded by that of the Mohammedan priests; and Modjopahit, famed for her wealth and splendor, the pride and glory of the Asiatic isles, was in the course of two years reduced to a wilderness.

Hoesen intrenched himself in another strong position, but, being again defeated by the victorious Mohammedans, he made terms with the latter and went to Damak, where he was kindly received by Raden Pateh, who was there established as sovereign of Java and all her dependencies, his adherents having invested him with the government under the title of Raden Pateh Adipati Jimboen.

CHAPTER XXX.

ESTABLISHMENT OF THE NEW FAITH.

ACCOUNTS differ as to the fate of the sovereign of Modjopahit after the fall of his empire. By some he is supposed to have perished in a subsequent engagement, and there are also accounts of his escape to the island of Bali. The Mohammedan chief of Damak, Raden Pateh, after reigning a few years, was succeeded in 1482 by his son as Sultan of Damak, who, dying in two years, was followed by his brother. The latter, becoming the third Sultan of Damak in 1484, is described as having been a just and intelligent ruler. He made treaties of peace with the islands and dependencies that had revolted after the fall of Modjopahit, established tranquillity in his own immediate dominions, and saw his religion accepted in all the provinces of Java.

During the reign of the third Sultan of Damak the western provinces were ceded to Sheik Moe-lana Ibrahim, with the title of Sultan of Cheribon; thus dividing Java again into two distinct kingdoms, each sovereign reserving the right to bequeath his lands to his children.

Consequently, when the Sultan of Cheribon

died, in 1501, his sovereignty was divided among his three sons. The eldest succeeded him as Sultan of Cheribon; the second received the kingdom of Bantam. The kings of Bantam were descended from this prince. The middle division between Bantam and Cheribon was given to Kali Jotan, who established his capital at the village of Jokatra, near the mouth of the river bearing the same name, and assumed the title of the Rajah of Jokatra. The princes of his family, called Pangeran Jokatra, reigned here till they were expelled in 1619 by the Dutch, who, after destroying their city, founded the present city (also called Jokatra) of Batavia on its ruins.

The third Sultan of Damak died in 1534, having divided his kingdom among his five sons and sons-in law, each with a title of Raden, Sultan, or Soesoenan, which, with the three previous divisions, split the ancient empire into eight separate sovereignties. Envy and ambition soon developed hatred and rivalry among the different princes, followed by dissensions, wars, depositions, and continual struggles for supremacy, till the Dutch appeared, and obtaining at last a conspicuous control in the government of the island, assisted the Soesoenan of Mataram in restoring a short period of tranquillity to the country; after which, the latter, in consequence of an ancient superstitious belief of the Javanese, that a place will never prosper when misfortune has once fallen upon it

and extended to the common people, moved his seat of government in 1668 from Mataram to Karta Soera. A succeeding Soesoenan, for the same reason, removed the capital to Soerakarta, where he built a palace, which has since remained the residence of the sovereigns of Java.

CHAPTER XXXI.

USURPATION BY THE DUTCH.

WHEN the Dutch first arrived at Bantam, they entered into a contract with the Javanese, whereby each agreed to act fairly and honestly by the other, and render mutual assistance against an enemy. The haughty and dictatorial bearing of the strangers soon wrought dissatisfaction, and a combat ensued in which a hundred or more Javanese were killed and the Dutch compelled to retire from Bantam. They returned, however, a few years later, to renew their commercial intercourse, and five years afterwards (1603 A. D.) erected a permanent establishment. Not long after this event they made overtures to the Prince of Jakatra, and, soon removing to that province, entered into an advantageous commercial compact with the sovereign. Other treaties, contracts, and stipulations were made with the Prince of Jakatra, also with the King of Bantam, the Dutch meanwhile building a fort and laying out an extensive factory at Jakatra.

One account of the manner in which the Dutch obtained their first footing in Jakatra has been translated thus by an English writer from Javanese history: —

“The Dutch, before they arrived at Jakatra, had formed an alliance with the Sultan of Bantam. They subsequently treated with the English and with Pangeran Jakatra; but after a time they found a way to play off a foul stratagem on the latter. In the first place, when they wished to ascertain the strength and resources of Jakatra, they landed like Mata-matas (peons, or messengers), the captain of the ship disguising himself with a turban, and accompanying several Khojas (a term by which the natives of the Coromandel coast are distinguished). When he had made his observations he entered upon trade, offering, however, much better terms than were just, and making more presents than were necessary. A friendship thus took place between him and the prince. When this friendship was established, the captain informed the prince that his ship wanted repair; and the prince, at his request, allowed the vessel to be brought up the river. Then the captain knocked out the planks of the bottom and sunk the vessel, to obtain a pretense for further time, and then requested a very small piece of ground on which to build a shed to store sails and other property, while endeavors should be made to raise the vessel. This request was also complied with. The captain then made a wall or mound of mud, so that nobody could know what he was doing, and in the mean time courted the friendship of the prince. He afterwards waited

on the prince, and requested as much more land as could be covered by a buffalo's hide, on which he might build a small shed. This being complied with, he cut the hide into strips, and claimed all the land he could inclose with them. To this also the prince, after some hesitation, consented. The captain then went on with his buildings, engaging that he would pay all expenses. When the fort was finished, the mud wall was removed; batteries were unexpectedly displayed, and under their protection the Dutch refused to pay a *doit*. War then commenced, in which the Dutch were reduced to such an extremity as to be obliged to use stones in lieu of balls, which were expended. Even this resource failed, and as a last expedient bags of the filthiest ordure were fired upon the Javanese, whence the fort has ever since borne the name of *Kota tai*."

Another version reads as follows:—

"The Dutch, having obtained the desired spot, built upon it a storehouse, and formed a garden for vegetables. When Pangeran Jakatra inquired why they did this, they replied they must have their conveniences, and that it was not the custom of the Dutch to live and eat like the Javans. The Pangeran was satisfied with the reason given, and allowed the work to proceed; but they had no sooner completed several buildings, by means of the people landed from their ships, than they began to surround them with a battery. The Pange-

ran again was roused, and inquired the reason for this, to which they replied that there were a great many traders about to arrive, and that it was necessary to protect their property from thieves. When the batteries were completed they planted cannon in them. The Pangeran inquired the reason of this preparation, to which they only replied it was to keep off bad people.

“In a short time, however, when the Dutch had increased in numbers, they fired one of the guns, and the ball discharged from it fell in front of the palace. The Pangeran inquired why they did so, to which they replied they were only trying how far the gun would carry, in order that they might be able to assist the Pangeran should he be attacked by an enemy. The Pangeran, however, was not satisfied with this reason, and demanded a fine of two thousand dollars for the insult, which the Dutch immediately paid. But it was not long before they fired another gun, the ball of which went over the palace, on which the Pangeran became highly incensed, and demanded a fine of four thousand dollars, threatening if it was not paid forthwith to write to the Sultan of Mataram, who would order them immediately to be driven from the island. To this menace the Dutch said nothing, but paid the money, which the Pangeran received with delight. The Dutch at last fired a gun, the ball of which fell within the palace, on which the Pangeran, conceiving it to

be their intention to attack him, immediately considered them enemies, and collected his people in order to fall upon them and destroy them without delay. As soon as the Dutch saw the people assembled, they fired from their batteries, dealing slaughter all around, and obliged the Pangeran and his people to retreat out of reach of the shot."

CHAPTER XXXII.

THE EMPIRE OF THE DUTCH.

THE Sultan of Mataram, who had hitherto been very friendly with the Dutch, and had given them permission to trade and build a fort at Japara, on the coast, some distance east of Batavia, was compelled to resort to arms or tolerate the disobedience of one of his subjects, the Toemeng'goong of Soerabaja. Following, it is said, the advice of the Dutch, he proceeded eastward with his army, which the former no sooner discovered than they availed themselves of the opportunity to take possession of Jakatra.

Two armies were sent to dislodge the usurpers. An engagement ensued, in which ten thousand of the Javanese perished, and the Dutch were successful in establishing their supremacy. We will pass over the detailed events occurring in the long period of petty intrigue and warfare depicted in the subsequent pages of Javanese history, in which the native princes were engaged in aggressive and defensive combats with the Dutch, either in unison or in separate sovereignties, — sometimes seeking the aid of the Europeans against a rebellious province, and again combining with

them in gaining a victory over the common foe ; the Dutch meanwhile assisting, approving, dissuading, or encouraging, as best contributed to the advance of their own power, the extension of their possessions, and the firm establishment of their capital at Batavia.

In 1706 a treaty determining the boundary between the territory of the Dutch and the Soesoenan at Soerakarta was signed, which did not extinguish, however, the internal discords among the Javanese, who continued fighting, and applying to the European government at Batavia for assistance in their continued efforts to depose one another, which led to the ratification of former treaties and the renewal of more extended negotiations with the Dutch, who in war and commerce always obtained the ascendancy, till at last, in concluding a treaty of peace, the island of Madoera and the cities of Soerabaja and Samarang, on the sea-coast, with several districts, were ceded to them.

Finally the reduced authority of the Soesoenan, his troubled government, and approaching death gave the Dutch the long-desired opportunity of gaining complete control of the whole country. The weakened monarch was induced “ to abdicate for himself and his heirs the sovereignty of the country, conferring the same on the Dutch East India Company, and leaving it to them to dispose of in future to any person they might think com-

petent to govern it for the benefit of the Company and of Java." This official document was dated December 11, 1749.

After the death of the Soesoenan, the Pangeran Mangkoe Boemi, brother of the late sovereign, and chief leader in the rebellions, failing to get the Dutch to acknowledge him as sovereign, and perceiving that they preferred instead to sustain a lad of nine years, the son of the deceased Soesoenan, and raise him to the throne, joined with the rebellious chiefs, renewed open hostilities, and fought a battle, in which he was defeated and driven westward. Soon recruiting his forces, he returned, and engaged in two successful encounters with the Dutch, routing them completely. Gaining another victory, he marched towards the north coast, where he fell upon Pakalongan and sacked the town.

Mangkoe Boemi, now victorious, received many additions to his forces, and marched to the gates of Soerakarta, where the former Soesoenan had removed and built the palace referred to as having since been the residence of the emperors of Java, and was prevented from plundering the capital only by the superstitious awe with which his followers regarded the gun Niai Stoini, held sacred by the Javanese, on seeing which upon the great square in front of the palace, they immediately retreated.

Nine years of harassing warfare failing to re-

duce the country to order, the Dutch, in view of the abdication made in their favor by the dying Soesoenan, gave ear to the proposals of Mangkoe Boemi to cede peace, if one half of Java were given to him.

They acceded to the prince's demand, with the stipulation that the latter was to do his utmost to subdue the rebellious chief Pakoe Ngoro. A treaty was signed in 1755, the Dutch governor proclaiming Mangkoe Boemi, Sultan Hamangkoe Boewono. The new Sultan, proceeding against Pakoe Ngoro, was defeated, and obliged to seek safety in flight and concealment, while Pakoe Ngoro burned his camp. The Dutch placed a reward on the head of the rebel prince, and Hamangkoe Boewono, reorganizing his scattered troops, pursued and defeated him.

Pakoe Ngoro still refusing to submit, the Sultan and the Soesoenan with their united forces attacked him, and after prolonging the contest for a period of two years, with no prospect of final success, he requested the grant of certain lands for his support, promising on that condition to maintain peace for the future. His terms were accepted, and he received liberal assignments of land and the title of Mangkoe Ngoro.

The lands of Mangkoe Ngoro lying between the dominions of the two Sultans (one called Soesoenan because it is a shade more religious) aided in preserving peace by keeping them farther

apart. The three claimants now compelled to be satisfied, the war, which had commenced in 1746, was ended in 1758, causing the Dutch an expenditure of nearly 4,300,000 florins.

The Sultan Hamangkoe Boewono established his capital at Djokjokarta, where his descendants still reign under the protectorate of the Dutch. After a long life he was succeeded by his son, Sultan Hamangkoe Boewono II. The present Sultan is Hamangkoe Boewono VI. The Soesoenan Pakoe Boewono III., during whose rule the kingdom was thus divided, died at Soerakarta in 1789; his successors continue to reign under the title of Soesoenan Pakoe Boewono IV., V., etc. Each of these princes receives an enormous annual revenue from the Dutch government, in return for which he is made, willingly or unwillingly, to govern his subjects according to the policy of his protectors, and to follow the advice of the latter in all political transactions. Both spend their incomes lavishly, and maintain their respective courts with all the dignity and splendor they deem befitting the royal blood of the sovereigns of Java.

CHAPTER XXXIII.

THE DUTCH EAST INDIES.

JAVA, as we have stated, belongs to the Netherlands, and is the one pearl of great price in the Dutch colonial crown. The sovereignty of the Dutch in the East Indian Archipelago is undisputed, and extends from the island of Sumatra on the west to the coast of New Guinea on the south-east, embracing the entire Malay Archipelago; consequently, the flag of the Netherlands floats its red, white, and blue over every island in the group. Half the island of Timor belongs to the Portuguese, whose capital is Timor Deli. The capital of the Dutch half is Timor Koepang. An immense tract of territory on the north coast of Borneo is owned by the British North Borneo Company, and this, with Sarawak, the principality of Rajah Brooke on the west coast, both acquired by private treaty and purchase from native Sultans, is under the protection of Great Britain. These two possessions, however, are very small in comparison with the extended territory behind them, which acknowledges allegiance to the ensign of the Netherlands.

The Dutch ports on all these islands, with the

regular system of steam navigation established, offer extended avenues for commerce, which are largely taken advantage of by the English and Chinese, trading from the neighboring port of Singapore, the capital of the Straits Settlements. The policy of the Netherlands in the East differs essentially from that of Great Britain. The latter appears to develop her colonies for their own benefit by applying the proceeds to their immediate improvement, thus endeavoring to render them self-supporting as rapidly as possible; while Holland appropriates the immense revenues received from her rich colonial islands in times of peace, and gives in return high taxes, stringent Dutch laws, and the blessings of government.

The Dutch East India Company, established in 1602, once monopolized the trade of the archipelago, and supplied the world with sugar, coffee, spices, and other valuable products from these equatorial regions; but this gigantic corporation has long since passed out of existence, and thrown the varied commerce of the East open to the enterprising and adventurous of all nations.

The Nederlandsche Handel Maatschappij established its factory in 1825, and has the monopoly of the transport and sale of the government produce. Its capital is enormous, and it does a very important business in loaning and advancing funds on prospective crops and estates, beside a banking business which extends to all parts of

the world. This is the most extensive mercantile corporation in the East.

In all the ports and places under Dutch rule, where the necessities of the population seem to make the demand, the government has established schools, hospitals, asylums, and places for Christian worship; especially has this been the case on the island of Java, where the large European element renders these accommodations essential to the welfare, contentment, and happiness of the inhabitants.

The Dutch Governor-General is the supreme head of both civil and military law throughout the Netherlands Indies. His Excellency represents the King of Holland, and from his mandate there is no appeal. He is assisted in the administration of the laws by the council of India, composed of five eminent statesmen appointed in Holland.

Various government schools and colleges are established in Holland, for the training and education of youths for the East Indian civil and military service. In these institutions, a good education is obtained, and secure employment provided for the future. The young functionary passes his examination, and with his commission in his pocket, is sent to India, where he receives a liberal salary, and after twenty years' service away from home, in this trying climate, he is allowed to retire on a pension sufficient to support him in

Holland the remainder of his life. In Holland, the government official must serve forty years before he can quit the service and receive his pension. The government service is divided into three classes. A functionary of the first class, going to India, must be a graduate of the higher classes of that branch of the service which he may have chosen, and has usually a diploma from one of the three Dutch universities, Utrecht, Groningen, or Leyden. The princes of Holland patronize the University of Leyden.

Notwithstanding the excellent schools which the government has established for the instruction of the natives in Java, they cling with the utmost tenacity to the written law of the Koran, and, with very rare exception, are avowed Moham-medans. The Dutch, however, are not enthusiastic about proselytizing them, and make it a rule never to interfere with their religion.

Mosques are scattered all over the island, and if a Christian enters them it must be with unshod feet. They are plain structures, square or octagonal in shape, with two or more roofs, receding one above the other, and surmounted with low round domes, the interior destitute of niche, image, or ornamentation. The mosques are usually surrounded by a terrace, ascended by handsome steps or a broad inclined walk leading up to the front entrance. Huge tanks of pure water are provided near at hand, where the Moslem

commences his devotions by bathing before entering the temple. Friday is the Mohammedan Sabbath. A daily service is held in the mosques, to which is added the duty following the muezzin's call at sunset. The worshipers kneel on small mats which they throw on the tile or marble floor, and, with faces turned towards Mecca, repeat prayers from the Koran. Their priests have generally made a pilgrimage to Mecca, to behold with their own eyes the birthplace of their Prophet, and to look with superstitious awe upon the Kaaba containing the sacred black stone. The broad white turban bespeaks the fulfillment of this highly meritorious act, and causes the wearer to be regarded with great reverence by the multitude.

CHAPTER XXXIV.

LIFE IN BATAVIA.

BATAVIA, the largest city in the archipelago, is situated on the northern coast of Java, near the mouths of the Tjiliwong and Jakatra rivers. The latter skirts the suburbs of the city on the west, and the Tjiliwong flows through its centre, both emptying into the Java Sea. Batavia has long been celebrated for its great beauty, and among Eastern cities stands without a rival. With its comforts, luxuries, and general air of elegance, it bursts upon the traveler in the Orient like a beautiful, unexpected, yet familiar friend, surprising and fascinating him with its attractiveness: he hails it with delight, and leaves it undecided whether he should describe it as a city, or as a vast park crowded with magnificent pavilions. In the upper or modern city, the streets are broad and handsome, arched overhead with rich masses of interlacing foliage, and intersected by canals, which are lined with stone and bordered with low stone parapets, and filled with water from the two rivers. These canals, crossed by fine bridges and flanked on both sides by wide streets, impart a pleasing impression of spaciousness to the city.

Rows of trees usually shade the parapets, while the opposite sides of the way are adorned with handsome residences, imbedded in dense clumps of green.

The public buildings are numerous, large, and substantial, consisting of churches, schools, asylums, hospitals, scientific institutions, government bureaux, libraries, museums, clubs, theatres, banks, and military quarters. An imposing new palace for the governor-general faces the Koningsplein, once the English racecourse, a grassy level some three miles in circumference, in the centre of the fashionable portion of the city, and encircled by a superb hard white street, bordered on each side with a double row of tamarind-trees.

The popular drive is around the Koningsplein; here may be seen every afternoon, between five o'clock and dark, equipages that will compare with those of any capital in Europe. Beautiful mansions face this gigantic green, which is the most marked feature in the open plan of beauty that distinguishes Batavia. The dwellings of the Europeans throughout the city are low, broad, one-storied structures, surrounded with deep verandas supported by numerous white pillars, and half hidden by heavy foliage, which tends to magnify their grand and palatial appearance, impressing the stranger with an agreeable sense of wealth, luxury, and magnificence.

Vessels dropping anchor in Batavia Roads are

immediately visited by an officer from the guardship, who, after examining the passenger list, and receiving satisfactory answers to the usual inquiries about sickness, etc., gives the passengers permission to go on shore. Steamers generally land their passengers at the new harbor, Tandjong Priok, where massive and elaborate piers have been constructed and lately completed by the government at great expense, to avoid the necessity of transporting cargo and passengers in small boats from vessels anchored out at sea, as formerly had to be done. Steam-cars run every half hour during the day between Tandjong Priok and the city, a distance of five or six miles, where they connect with trains for the interior.

When the traveler, just liberated from a five or six weeks' sojourn in the stuffy cabins of a steamship, or perhaps from a three or four months' voyage in a sailing-ship, finds himself flying up the Molenvliet — the chief thoroughfare between the fashionable part of the city and the business quarter, down towards the harbor and coast — in a comfortable if not luxurious carriage drawn by swift ponies, behind a brown coachman in a sort of long red calico jacket, shaded with a bamboo hat that looks like a parasol, he will doubtless experience the most lively emotions of surprise and pleasure. Here comes a Chinese peddler, in white or light-colored pajamas, bare feet, and bare head, with two or three Malays carrying his

goods, suspended from springy slats of bamboo stretched across their shoulders; next, the elegant carriages of merchants going to town, with their owners, in immaculate white clothes, indolently reclining on the cushions inside; then three or four half-naked coolies carrying between them, perhaps, a piano, tied with ropes to a bamboo pole; next a curious little covered native carriage on two wheels rattles past; then a clumsy cart drawn by two buffaloes creaks along; then come dark, round-faced natives, with chickens tied together by the legs, and hung, heads downward, across the ends of bamboo poles balanced on their shoulders, followed by others carrying cages filled with struggling birds or pigeons, and baskets containing snakes, fish, coral-colored shrimps, or whatever they may be; while steam-cars puff and whistle up and down the railroad on the edge of the canal which runs parallel with the street, bearing on its still and yellow waters rafts poled onward by almost naked brown-skinned men. One side of the Molenvliet is lined with the shops and dwellings of the Chinese and Malays, and occasionally the residence of a European. Here and there under the spreading shade of the waringin or the tamarind tree, native women sit, selling cooked rice in various forms, and serving it on the fresh green leaf of the plantain to the moving throngs, composed of Malays, Chinamen, Bugis, Arabs, and Javanese of every age and

color ; some well dressed, some poorly dressed, and some naked, except a sarong around their waist and hips. Passing through these strange scenes, the traveler at last reaches his hotel, where white marble floors, broad halls, large, cool rooms, deep verandas, and many servants give promise of rest and comfort in the days to come. Here, as soon as he gets accustomed to the little brown lizards that live in the closets, hide in the corners of the sofas, scamper across the tables, and occupy the beds, he may begin to enjoy the luxury and languor of Oriental life, which glides along in Batavia somewhat after the following fashion.

It is usual to rise with the sun, which shoots suddenly above the horizon at about six o'clock, the year round, in a few moments replacing the soft darkness with a brilliant and penetrating light. As the dwellings have but one story, on account of earthquakes, the bedrooms are on the ground floor, with immediate access to the verandas, to which the newly-arisen at once proceeds, to drink coffee, tea, or chocolate, and eat a biscuit, after which he resorts to the bath, generally a large room in the rear, where a refreshing plunge, or douche, or perhaps the cool mountain water thrown over the head, in the Eastern fashion, temporarily dispels the climatic languor, and reinvigorates his energy. The bath over, the Dutchman takes a stroll in his pajamas, carelessly

puffing meanwhile a fragrant cigar, and the Englishman sometimes a ride on horseback ; both returning to dress and partake of a nine o'clock breakfast, which is served in a broad, cool hall, and is similar to the same meal in America or England, with the addition of an abundance of luscious tropical fruits. After breakfast, the gentlemen of the family are driven to town in their carriages, and the ladies, in native dress, with hair hanging loose down their backs, spend the morning in reclining on the sofas in the shade of the verandas, gossiping, reading, or receiving early calls from friends of their own sex coming in closed carriages, and in undress like themselves. At one o'clock, the midday meal (tiffin) is served, when the Eastern cooks astonish the foreigner with the number of their highly seasoned preparations, which are eaten with the one standing dish of rice and curry, to which are added salted duck's eggs, meat, vegetables, fruits, wine, and coffee. When this abundant meal has been duly honored, the Eastern household, from mistress to maid, and butler to scullion, retire to refresh themselves by passing two hours or more during the hottest part of the day in sleep. At four o'clock, the house springs into life again, tea is served, as in the early morning, a second bath is enjoyed, succeeded by an elaborate toilet, when an airing, without hat or bonnet, in splendid open equipages, attended by numerous dark-skinned

servants in bright dress, which gives piquancy and quaintness to an already animated picture, is taken around the Koningsplein and to the Waterloo plain, a large green square, where the military band plays every Sunday afternoon, drawing a large concourse of fashionable people, as well as the natives of the neighboring villages. About six o'clock, the sun drops behind the western mountain ridges, and immediately it is dark, and the vehicles, with their chatting occupants, gradually disperse, to whirl homeward to an eight-o'clock dinner, which is a somewhat elaborate affair.

In the evening, visits are made or received, clubs and receptions are attended, the opera or theatre is resorted to, and Batavia is alive with activity and animation. By twelve and one o'clock the city has sunk into slumber, to awaken again the next morning and take up the life of the previous day, with little variation throughout the year.

CHAPTER XXXV.

TRAVELING IN JAVA.

IF one has plenty of time, traveling in Java is a novel and pleasing experience. The recent construction of a railroad, penetrating the interior from Batavia, has greatly lessened the difficulty of getting over the island; but when a different route is contemplated, the ancient diligence is the only means available. This coach is the highest, most cumbersome, and most delightful vehicle imaginable. It is strong, gigantic in size, well padded, has springs that make it rock like a cradle, with capacious pockets, and concealed recesses in which to stow away everything requisite for a journey. During the day a hammock can be swung within its curtains, and at night its cushions can be converted into a commodious bed.

The day before starting on a journey in the diligence, orders are sent forward to have fresh horses ready at the different stations. When everything conceivable as necessary for a journey is packed out of sight in the maw-like cavities of the old coach, four plucky little ponies are attached, and the travelers mount to their seats. The driver, in a red or pink calico garment re-

sembling a long loose nightshirt, and a bamboo hat in shape and size like an umbrella, twirls a whiplash, many yards long, above his head, producing two or three reports like pistol-shots; and with many "slamat jalans" — happy journeys — from the admiring natives, away go the ponies over the smooth roads at full gallop, accompanied on each side by two or three coolies, whose business it is to run beside the ponies, whip them up, and keep them at their utmost speed. This continues for five miles, the coach swinging and rocking in the most enchanting fashion, when suddenly a halt is made in a covered station, the steaming horses and the whippers-up are quickly exchanged for fresh ones, and the journey is continued with the same changes, which are made all over Java. When mountains are to be climbed, the patient buffaloes are added to, or replace, the horses, till the heights are overcome.

To describe the lovely landscapes that charm the eye, the towering mountains that hide in the clouds, and the far-reaching views stretching over land and sea, that repay the tourist on these excursions, would be quite impossible. Sometimes he is inclosed in valleys so deep that he can only gaze upwards to the blue overhead; again he is traversing plains so immense and solitary that nothing is visible save the vast levels bounded on one side by the dark outline of a mountain range, and on the other by the blue rim of the drooping

sky. Then he penetrates the perpetual gloom of forests crowded with the symmetrical trunks of the teak; and sometimes he pauses upon a mountain road, lost in admiring the grandeur of the scene unrolled below him. On these majestic heights he will see old craters, filled with water rising from beneath, that appears to be black, or blue, or shaded with the varied and brilliant tints of the rainbow; boiling streams rushing downward beside those of icy coldness, cascades falling over rocks in huge, fan-like forms of silvery spray, and single jets of gigantic size pouring down perpendicularly three or four hundred feet. In short, to see Java from the open windows of a diligence is to be introduced to a strange and lovely world of wonders.

It is the custom to set out very early in the morning, and to rest during the heat of the day at a hotel, or, if provided with proper introductions, at the house of a planter or the residence of a native regent. In any event, the traveler is made welcome, and usually sets forth again about four o'clock in the afternoon, passing the night in one of the habitations above named. If disappointed in this, the hammock is swung in the coach, or the cushioned bed prepared, while the friendly natives maintain guard outside. If it is necessary to halt in this manner near a forest or a jungle, fires are made, and a watch is set to keep off the tigers. With a little good management, however, a proper shelter can always be reached.

The planters of Java are really the princes of the land. Their extended domains frequently render life on a plantation quite isolated, for which they endeavor to compensate by surrounding themselves with every personal comfort and much grandeur. On the coffee estates, situated on high grounds, the air is delicious, and the prospects are often so magnificent that the loss of society is scarcely a deprivation; but on the rice and sugar plantations on the low plains, where the heat is intense, bringing into constant demand the fan and bath-room, the view necessarily contracted, and life dull and sluggish, the monotony often becomes almost intolerable. Frequent trips in the great coach to the cities on the coasts, and hospitable entertainments in their princely homes, are the sugar-planters' only refuge against solitude. These grand seigneurs are kings on their own estates, often issuing their own coin, as a convenience for the thousands that cultivate their lands and dwell on their soil.

The traveler, having completed his tours in Java, and learned, like the scholar, just enough to know how much there is to learn, now feels like extending his wanderings to other islands in the archipelago. He therefore leaves Batavia in one of the Dutch steamers that make the regular round of all the Dutch ports, getting back to the beautiful city in about six weeks, after having seen still stranger people, and witnessed many

curious phases of civilization, and perhaps cruel evidences of absolute barbarism.

The time comes at last when he decides to go home, and the question arises, Which way shall he go? Not as he came, for change is always desirable. There are Singapore, China, Japan, and the Pacific, offering something perhaps entirely new. To Europe, however, he wishes to return, and one of the large and comfortable sailing packets going around the Cape of Good Hope presents the best accommodations for the multitude of souvenirs he intends to transport; so he goes on board with the birds, monkeys, parrots, serpents, flying foxes, strange plants, rare shells, and possibly one or two tiger cubs, with which he has encumbered himself, and gives himself up to rest and recuperation after his exhausting rambles under the equator, enjoying the dreamy days and quiet nights, when neither he nor his vessel appears to move, yet he still glides on and on, leaving the perfumed air and soft winds behind him, suddenly to wake up some morning and find frozen decks and icy spars, and the pure white albatross circling above the rolling and pitching ship, under the sombre skies south of Cape Town.

The perpendicular rock of St. Helena will probably next attract his special attention, and a day spent on the island, where the air is warm and heavy, and the Ethiopian element visible in many of the inhabitants, will remind him of the sunny

south of the United States. A drive of fourteen miles carries him around the little island, and a visit to Longwood, where Napoleon I. breathed his last, and the purchase of a photograph of the wretched, barn-like dwelling in which he lived and died, will make him glad to get back to the playful cubs and mischievous monkeys on board his ship. Soon follow more of the dreamy days under the equator, which he must cross a second time, where the glorious brilliancy of the sunsets exceeds the magnificence of those that he has witnessed in the same latitude on the Indian Ocean; and the dolphin, the porpoise, the shark, and the grampus, disporting under the glassy water, produce the only ripple of excitement in the wondrous stillness.

At last the beautiful days and brilliant skies have joined the other memories of the East, and his good ship is moving slowly along under the sombre grays that hang above the bright green meadows of Holland, seeming to tug at their far-away edges in futile attempts to drag them back to the dark gloom of the North Sea. Here we shall leave him gazing at the low, willow-fringed dykes and beckoning arms of the welcoming windmills, to meet him again, perhaps, and renew our companionship with a glad, "Dag, mynheer," as he springs ashore on the shady Boompjes of the old Dutch city of Rotterdam.

INDEX

- Acheen, 24, 43; war in, 113.
 Agate, 30.
 Agricultural occupations, 51, 122;
 implements, 102.
 Aji Saka, 143, 157.
 Albuquerque, Alphonzo d', 22.
 Alphabet, 138, 156.
 Amok, to run, 123.
 Anger, 104.
 Angka Wijaya, 162, 163, 164, 168.
 Arabs, 87, 89, 90, 115, 126, 191; mis-
 sionary, 164.
 Aria Damar, 163, 164, 166.
 Arjuna, volcano, 28.
 Aromatic grasses, 52.
 Arrack, 119.
 Attap, 60.
 Bali, Strait of, 22, 104; island and
 language of, 138.
 Bamboo, 51, 56; uses of, 59, 60; hut
 of, 91.
 Banana, 52.
 Bantam, 18, 24; kings of, 125, 171,
 173; Dutch at, 23, 173.
 Banyan-tree, 60.
 Batavia, 10, 20, 24, 44, 89, 189; beauty
 of, 26, 188; founded, 171, 178; life
 in, 192.
 Bathing, 96.
 Bazars, 105.
 Behouden channel, 15.
 Bintara, 52, 166, 167.
 Birds, 67, 77.
 Blandong people, 119.
 Blédeg, 37.
 Boa-constrictor, 83.
 Boars, wild, 67.
 Boiling streams, 30.
 Bolt, Governor-General, 24.
 Borneo, 155, 183.
 Boro Bodo, temple of, 152, 153.
 Brahma, 142, 153.
 Brambanan, 146, 148.
 Bread-fruit tree, 60.
 British North Borneo Company, 183.
 Bromo, 29, 38; crater of, 39, 40.
 Brooke, Rajah, 183.
 Buddha, 142, 153.
 Buffalo, 63, 122; tiger combat, 136.
 Buitenzorg, 26.
 Bugis, 191.
 Bulls, wild, 67, 69.
 Calc-spar, 36.
 Camels, 64.
 Camphor-tree, 51.
 Cape of Good Hope, 199.
 Carnelian, 30.
 Castlereagh, Viscount, 25.
 Cemeteries, 132.
 Centipedes, 82.
 Ceylon, 10.
 Chameleon, 82.
 Cheribon, 29, 36; Sultan of, 170, 171.
 Chinese, 87, 89, 191.
 Cinchona, 51, 101.
 Circumcision, 127.
 Civet, 71, 72.
 Cloth, making of, 54, 118.
 Coal, 46.
 Cobra, 84.
 Cock-fighting, 136.
 Cocoanuts, 34; oil of, 103.
 Coen, John Pietersen, 25.
 Coffee, 34, 51; culture of, 106, 108;
 government, 107; amount raised,
 108; berries, 109.
 Colombo, 10.
 Cord, 54.
 Cotton plant, 102, 111.
 Cotton-tree, 60.
 Cows, 64.
 Crocodiles, 67, 68; price for, 69;
 haunts of, 70; fat of, 71.
 Curry, 98.
 Dadap-tree, 109.
 Damak, 166, 168, 169; Sultan of, 170,
 171.

- Dancing-girls, 133, 134.
 Death, ceremonies at, 132.
 Deer. See *Kantjil*.
 Devi, 148.
 Dialects, 138, 139.
 Dieng Mountains, 62, 145.
 Diversions, 136, 137; of children, 134, 135.
 Divisions of time, 142.
 Divorce, 88, 131.
 Djokjokarta, 26, 146, 151, 182.
 Dogs, wild, 71.
 Doves, ring and turtle, 78.
 Dress, 93, 94, 95.
 Ducks, 77; eggs of, 98.
 Dutch, first arrival in Java, 23, 173.
 Dutch East India Company, 25, 179, 184.
 Dutch East Indian Empire, 24.
 Dutch protectorate, 26, 115, 182.
 Dutch resident, 114.
 Dutch rule, 113, 114, 115.
 Dutch universities, 186.
 Dwarfs in den Weg, island, 17; appearance of, 18.
 Dyes, 56.
 Earthquakes, 29, 38. See *Krakatoa*.
 East Indian Archipelago, 21, 22, 154, 183.
 East Indian service, 185.
 East Indies, Dutch settle in, 23.
 Edible birds'-nests, 79, 80.
 Egypt, 154.
 Elephants, 64.
 Emperor's Island, 17.
 English East India Company, 24.
 Entertainments, 133, 134, 141.
 Eruptions. See *Earthquakes*.
 Esculent swallow, 79.
 Europeans, 122, 185; dwellings of, 189.
 Falcon, 76.
 Fish, 84; frog, 82.
 Flint, 30.
 Flowers, 52.
 Flying fox, 67, 76; squirrel, cat, 73.
 Food, 98.
 Forests, 51.
 France, 24.
 Fruits, 51, 52.
 Gamalan, the, 141.
 Game, 67.
 Games of chance, 137.
 Gas fountains, 37.
 Gedeh, volcano, 27, 28.
 Genesa, 148.
 Gheko, 81.
 Goats, 66.
 Gold, 46.
 Governor-general, 185.
 Great Britain, 183, 184.
 Gresek, 31, 162.
 Guwa Upas, 62.
 Hamadryad, 84.
 Hamangkoe Boewono, 182.
 Handicrafts, 118.
 Hanuman, 148.
 Harbors, 26, 190.
 Hats, native, 56, 94.
 Hegira, the, 143.
 Heron, 76.
 Het Groote Gat, 15.
 Hindu Empire, 142, 158.
 Hindu sovereigns, 158, 159, 169.
 Hindu superstitions, 40, 68, 127.
 Hindu worship, 144, 146, 151, 158.
 Holland, 113, 184, 200; king of, 185.
 Holy fires, 37.
 Horses, 64; number of, 65.
 Hot wells, 36.
 House, peasant's, 91; noble's, 92.
 Houtman, 23.
 Ichneumon, 73.
 Iguana, 81.
 Important productions, 34.
 Indian Ocean, sunsets in, 11; storms in, 12.
 Indigo, 111.
 Indrapoera, 13.
 Introduction of the Mohammedan religion, 160, 162.
 Jakatra, 24, 25, 171, 173, 174; river, 188.
 Jasper, 30.
 Java, routes to, 9; appearance of, 19; situation of, 21; name of, 21, 156; area of, 22; population, 22, 65; divisions of, 22; Mohammedan conquest of, 22; Dutch settle in, 23; French in, 24; British in, 25; lowlands of, 32; temperatures in, 34, 50; fertile soil of, 46; salubrity of, 49; vegetation of, 50; nature's special pet, 85; contrasts, 86; wealth of, 101; roads, 104; rights of land in, 112; Dutch rule in, 113, 114, 115; first inhabitants of, 154, 155, 156; early history of, 159, 163; Dutch establish their supremacy in, 178; cost of war in, 182; traveling in, 195, 197; planters of, 198.
 Java Head, 13, 28.
 Java Sea, 14, 18, 22, 26, 33.
 Javanese era, 143, 157.
 Javanese people, the, 87, 88; indolence, 47; easy life of, 65; dress, 93; jewelry, 95; occupations, 118,

- 119; character, 120; credulousness, 121; kindness of, 122; jealousy of, 123; habits of, 124; faith of, 125; respect for rank, 127, 128. See *Entertainments*.
 Jawa-woet, 21, 156.
 Jungles, 34.
- Kaaba, 187.
 Kadawang district, 31.
 Kadoe, province of, 152.
 Kantjil, 67, 72.
 Karang, volcano, 28.
 Kasaka people, 156.
 Koningsplein, 189, 194.
 Koran, 115, 124, 186.
 Krakatoa, 14, 38, 41; appearance of, 17; eruption of, 42-45.
 Kris, 94, 96, 97, 123, 129, 159.
- Lancaster, Captain, 24.
 Language, of honor, 128, 138, 139; Sunda, 138; Kawi, 140.
 Leopard, 70.
 Literature, 140; poems, 141.
 Lizards, 81, 82, 192.
 Longwood, St. Helena, 200.
 Loro Jongrong, temple of, 148.
- Macassar, island of, 43; horses from, 64, 65.
 Madoera, island of, 138.
 Magnolia, 53.
 Mahogany-tree, 51.
 Maize, 103.
 Malacca, city of, 22, 23.
 Malay Archipelago, 9, 183.
 Malays, 87, 90, 124, 138, 191.
 Mangkoe Boemi, 180, 181.
 Mango, 52.
 Marabout, 76.
 Marriage, 131.
 Mats, 55, 56, 92.
 Mecca, 125, 187.
 Merapi, volcano, 28.
 Merbaboe, volcano, 28.
 Metals, 46.
 Minerals, 46.
 Minto, Earl of, 25.
 Modjopahit, 125, 158, 161, 165-169.
 Mohammedan conquest, 22, 169.
 Molenvliet, 190, 191.
 Molucca Islands, 23.
 Monkeys, 73; varieties of, and habits, 74.
 Monsoons, 16; dry, 48.
 Moral precepts, 116.
 Mosques, 186.
 Mountains, 28, 30.
 Music, 141.
- Nakoda Ismael, 22.
- Napoleon, 200.
 Natives. See *Javanese people*.
 Nederlandsche Handel Maatschappij, 184.
 Netherlands, 25, 183.
 New Horn, 25.
- Oceania, 21.
 Oengarang, volcano, 28.
 Oleander, 53.
 Omens, 74, 82, 120, 121, 171.
 Opium, 90; smoking, 99.
 Otter, 72.
 Ox, 64.
- Padang, 10, 12.
 Pajajaran, 157, 160.
 Pakoe Ngoro, 181.
 Palaces, Sultan's, 92, 93.
 Palm, varieties of, 51.
 Panthers, 67, 70.
 Papandajung, eruption of, 29, 45.
 Paper-tree, 55.
 Partridges, 77.
 Paroquets, 77.
 Passaran, 155.
 Patjitan, 26.
 Peacock, 67, 75, 77.
 Pelican, 67, 76.
 Pepper, red, 98.
 Pesantran, 56.
 Petroleum, 36.
 Pigeons, 77.
 Planters, 106, 198.
 Plover, 78.
 Pohon upas. See *Poison-tree*.
 Point St. Nicholas, 18.
 Poison-tree, 61.
 Polygamy, 88; effects of, 123.
 Porcupine, 72.
 Porphyry, 30.
 Portuguese, 22, 23, 125, 183.
 Post stations, 104.
 Potato, 103.
 Practice of filing the teeth, 95, 96.
 Preanger district, 65.
 Precious stones, 46.
 Priests, 115, 126.
 Prince's Island, 15.
 Pumice, floating, 14, 42; showers of, 43.
 Python, 83.
- Quail, 77.
 "Queen of the East," 20.
 Queen Elizabeth, 24.
- Radan Adipati, 114.
 Radan Patah, 166-170.
 Radan Rachmat, 162, 163, 164.
 Railroads, 104, 195.
 Rattan, 51, 55.

- Regents, 92; dress of, 95.
 Religion, Mohammedan, 68, 125.
 Residencies, 22.
 Resident, 114.
 Rhinoceros, 67; habits of, 69; horn of, 70.
 Rice, plantations of, 33; cultivation of, 51, 102.
 Rice sawahs, 15, 32, 101.
 Rights of land, 112.
 Rivers, 30, 31; general characteristics of, 32.
 Roebuck, 67, 69, 72.
 Rotterdam, 200.
 Rubber-tree, 51.
 Ruins, 141, 144-153.

 Saint Helena, island of, 199.
 Salak, volcano, 27, 28.
 Samarang, 26, 89, 179.
 Sandalwood Island, horses from, 64, 65.
 Sandalwood-tree, 51.
 Sandy Sea, description of, 38, 39.
 Sarong, 93; painting of, 118.
 Scenery, 33, 196, 197.
 Schools, 185, 186.
 Scincoidian, 82.
 Scorpions, 82.
 Seasons, 16, 48.
 Sermiroe, volcano, 28; outbreak of, 38.
 Serpents, 82; varieties, 83.
 Sharks, 84.
 Sheep, 66.
 Sheik Ibn Moelana, 165.
 Siamese, 155.
 Silver, 46.
 Sindoro, volcano, 28.
 Singapore, 10, 184.
 Siri, 96, 99.
 Siva, 148.
 Slavery, 88.
 Soap-tree, 59.
 Soemba, 64.
 Soerabaja, 26, 89, 104, 179.
 Soerakarta, 26, 146; palace at, 93, 172, 180.
 Soesoenan, 31, 93, 114, 167, 179; succession of, 115; respect for, 127; state observed by, 129; public appearance of, 135.
 Solo River, 31.
 Spices, 51.
 Stag, 67, 69; hunting, 136.
 Stork, 76.
 Straits of Sunda, 13, 22, 42, 43, 104; description of, 15, 16.

 Straits Settlements, 184.
 Suez Canal, 10, 11.
 Sugar, 34, 51, 98; cane, 101; manufacture of, 104; palm, 103.
 Sultan, 130.
 Sultan Hamangkoe Boewono, 182.
 Sumatra, 12, 13, 24, 41; horses from, 64; Malays from, 87; pepper, 111.
 Sumbah, 129.
 Sumbawa Island, 38, 45.
 Sunda Islands, 21, 37, 64.
 Superstitions. See *Omens*.
 Swine, 66.

 Tagal, volcano, 28.
 Tallow-tree, 60.
 Tambora, volcano, outburst of, 38, 45.
 Tandjong Priok, 190.
 Tankoeban-Prahoë, volcano, 28.
 Taxes, 112, 184.
 Tea, 34, 51.
 Teak, forests of, 51, 119; tree, 58; varieties of, 57.
 Temperatures, different, 34, 50.
 Teng'gers Mountains, 29, 38, 40.
 Thousand Isles, 18.
 Thousand Temples, 149, 150.
 Tidal wave, 44, 45; loss of life from, 41.
 Tiger-cat, 67, 71.
 Tigers, 67; habits, 68; combats, 136.
 Timor Island, 183.
 Tjilatjap, 26.
 Tjiliwong River, 188.
 Toads, 82.
 Tobacco, 34, 51; use of, 99; cultivation of, 110.
 Trade winds, 16.
 Tritrista, 157.
 Turtles, 82.

 Valley of poison, 62.
 Varken's Hoek, 18.
 Victoria regia, 53.
 Volcanoes, 28.

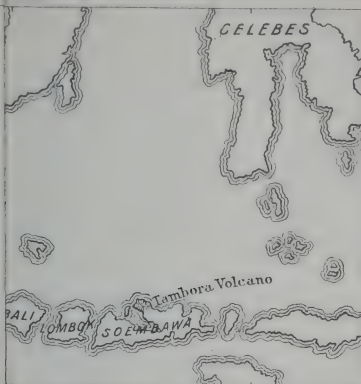
 Waringin-tree, 60, 92, 93.
 Wax-tree, 59.
 Wells, hot, 36; mud and salt, 37; gaseous, 37.
 Wild-cat, 72.
 Wild cock, 76.
 Wild fowl, 77.
 Wild goose, 78.
 Wolves, 71.
 Woodcock, 78.
 Wynkoops Bay, 26.

108

AVA

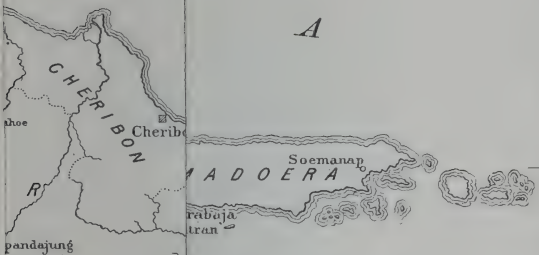
ENGLISH MILES
40 50 60 70 80 90

A



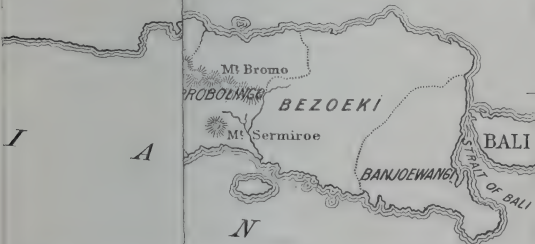
6

A



7

8



I

A

N

108

113

114



BOSTON PUBLIC LIBRARY



3 9999 09900 515 7

